

# The Mining Journal

## RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 875---VOL. XXII.]

LONDON, SATURDAY, MAY 29, 1852.

[PRICE 6D.]

### VALUABLE MINE MATERIALS FOR SALE.

**MR. MURRAY** has been instructed to SELL, BY PUBLIC AUCTION, on Monday, the 31st day of May inst., at Two o'clock in the afternoon precisely, at Caradon Great Consolidated Mines, in the parish of LINKINHORNE, in the county of CORNWALL, the following very valuable

#### MINE MATERIALS

thereon—comprising 1 first-rate STEAM-ENGINE, 22 and 40 inch cylinder (Sims's combined), 1 boiler, 1 ton, 1 horse-whim, shaft tackle, chains and kiddles, 1 5-inch plunger lift, 35 fathoms, 1 5-inch drawing lift, 15 fathoms, 35 fathoms main-rod strapping, plates and bolts, 50 fathoms ladders and dividing timber, smiths and miners' tools, smith's bellows and anvils, carpenter's bench, and saw-pit frame, counting-house furniture, &c. The auctioneer, in submitting the above for public competition, assures mine agents and others that all the before-mentioned materials are of a very first-rate description, and will be positively sold to the best bidder.

For a view of the above, application should be made on the mine, and any further particulars may be known of the auctioneer.

**MONEY TO LEND.**—£20, £50, £100, £500, and £1000, on the security of Farm Stock, &c., and the sum of £3000 on Mortgage of Freehold or Leasehold Property. Apply to Mr. Murray, auctioneer, bid-discounter, and share dealer. Dated Castle View, Liskeard, May 17, 1852.

### OLD BRIMPTON MINE, IN THE PARISH OF LIDFORD, DEVON.

**MESSRS. JAMES WHITE & SON** will SELL, BY PUBLIC AUCTION, at the Mart, Bartholomew-lane, on Monday, the 7th of June, 1852, at Twelve o'clock noon, in One Lot, all the

#### MACHINERY AND MATERIALS

on the above MINE—comprising 3 WATER WHEELS, of 25 feet and 25 feet diameter, and 4 feet breast; 370 fathoms of rods, pulleys and stands, 2 bobs and rods, in shafts, 2 lifts of pumps, 6 heads of stamps, attached to wheel, dressing department, complete, whim and rope pulleys, capstan and rope, smith's tools, and the usual materials of a mine in full work.

Particulars may be obtained at the Auction Mart; also of Mr. George Stranger, Holne, Ashburton, Devon; and of the auctioneers, 1, Union-court, Old Broad-street.

TO RAILWAY COMPANIES, CONTRACTORS, MINERS, ENGINEERS, BROKERS, AND OTHERS.

**MR. W. KIRK** is honoured with instructions from Messrs. Pauling and Co., the eminent contractors, to arrange, catalogue, and SELL, BY AUCTION, at LEEDS, in the week after next, all their valuable

#### PLANT, MATERIALS, UTENSILS, &c. &c.

lately used by them in their contract of the Leeds Water-Works, including about THIRTY-FIVE TONS OF TRAM RAILS, BRIDGE AND T-METALS, Tipping waggon and lorries, travelling cranes, goliath, with crab and runners, dobbin carts and barrows, blocks, chains, vices, anvils, nails, cast-iron and wood pumps, many thousands of bricks, and a quantity of materials suitable for contractors' purposes. Full particulars, with date of sale, in next week's papers, and catalogue, which may be had at the White Horse Hotel, Boar-lane, Leeds; or at the offices of the auctioneer, 34, Princess-street, Manchester; or by post, on receipt of two stamps.

### IMPORTANT TO COAL, COPPER, AND LEAD MINE PROPRIETORS.

**MR. R. EDWARDS** has received instructions to SELL, BY AUCTION, at Penrhyn Mawr Coal Mine, BERW, near Garwern Station, ANGLESEA, on Wednesday, the 25th day of June, 1852 (unless previously disposed of by private contract, of which due notice will be given), all the recently erected

#### VALUABLE MACHINERY, &c.

belonging to the above coal works—consisting of 1 MARINE ENGINE, 60-horse power, with 3 boilers, &c., complete; 1 of 15-horse power, with 2 boilers, &c., complete; a set of pumps, 70 yards of 14-inch bore pipe, a ditto, 70 yards of 10-inch bore ditto; both having every requisite and in full working order; 1 fly-wheel, 18 ft. diam., weight 5 tons. A perfectly new WEIGHING MACHINE, on the most approved principle, warranted to weigh 5 tons, by Greg, of Liverpool. A considerable quantity of ropes and chains, of different sizes, flat and round, wrought-iron, nuts, screws, &c., timber frames and poles, &c. A new bellows, anvil, screw plates, and every other requisite for an extensive smithy; colliery tools for underground work. Also, a large beam and scales, with one ton of weights, of different sizes. The sale to commence at Eleven o'clock. For further particulars apply to the auctioneer.

COAL MINES AND MINERALS, in the county of LANCASHIRE, on the RANGE of the GREAT COAL-FIELD at ST. HELEN'S.

**MESSRS. FOSTER AND SON** are directed by the trustees for sale of the estates of Sir William Stanley, Bart., to SELL, BY AUCTION, at the Mart, on Tuesday, the 6th July, at Twelve o'clock noon, in One Lot, all the

#### COAL MINES AND MINERALS

under an estate of about 500 statute acres of mineral ground, situated in the township of BICKERSTAFFE, in the parish of ORMSKIRK, lying about the centre of the coal district, and surrounded by the Bickerstaffe, Latham, Rainford, and Skelmerdale Collieries, which mineral ground has been carefully bored and sections of the strata made by Mr. Daglish, an eminent mining and civil engineer, whose great experience as a coal master, and high reputation as a colliery viewer, will ensure to those who know him the most perfect confidence in his report. Having bored through several seams of coal to a depth of upwards of 215 yards, he found the well-known valuable mine called RUSHEY PARK, below which (about 50 yards) always exists the yard mine, or "little delv," which is the lowest of the series, and is considered a valuable coal in the district; the three workable seams actually bored through, to which adding the yard mine undoubtedly existing under about 150 statute acres on the south-west side of the MAIN FAULT, from their specific gravity will produce, at a moderate calculation, upwards of 2,400,000 tons of coal, besides the mines that may exist under about 70 statute acres on the north-east side of the Main Fault, which have not been sufficiently proved so as to be taken into calculation. The situation of the mineral ground, and its proximity to the Lancashire and Yorkshire Railway, being under a mile from the Rainford Station, and about 11 miles from the Great Market (Liverpool), also being the nearest coal-field of any at present in operation, gives a considerable advantage in the transit by railway. The particulars, with a plan of the estate and section of the strata, may be had, 21 days previous to the sale, of Mr. Daglish, sen., Orrell Cottage, near Wigan; Mr. Walls, post-office and news-room; Victoria Hotel (both in Wigan); Adelphi Hotel, Liverpool; Albion Hotel, Manchester; Raven Hotel, St. Helen's; Mr. John Daglish, mineral and land surveyor, of that town; also of Messrs. Gregory, Faulkner, Gregory, and Skirrow, solicitors, 1, Bedford-row, London; of Messrs. Cox and Williams, solicitors, Lincoln's-inn-fields; at the Auction Mart; and of Messrs. Foster and Son, 34, Pall Mall.

**SOMERSETSHIRE.—VALUABLE COLLIERY AND FREEHOLD LANDS.**

**TO BE SOLD, BY AUCTION,** by order of trustees for sale at the Red Lion Inn, in BISHOP SUTTON, on Tuesday, the 15th day of June, 1852, at Three o'clock for Four in the afternoon precisely (unless an acceptable offer be made in the meantime by private contract), the

#### SUTTON OLD COLLIERY.

situate at BISHOP SUTTON, in the parish of CHEW MAGNA, county of SOMERSET, with the COUNTING-HOUSES, ENGINE-HOUSES, and other necessary ERECTIONS and BUILDINGS, YARD, BARTON, and APPURTENANCES, together with all the valuable PLANT, STEAM-ENGINES, MACHINERY, APPARATUS, and IMPLEMENTS thereto belonging, containing 14, 32, & 342.

And the SITE of another COLLIERY, called the NEW COAL WORKS, wherein two pits or shafts were sunk at a great expense, and worked by the late proprietor, until he had purchased the Old Colliery, together with the PARCELS of LAND adjoining, and TWELVE comfortable COTTAGES, with gardens, occupied by the workmen, containing together 44, 14, & 14.

The COLLIERY comprises veins or seams of coal and minerals underneath, about 300 acres of land, all which are held in fee simple, except about seven acres, which are held under mining leases or grants. The MACHINERY consists of two steam engines, one used for pumping, with a cylinder 26 inches in diameter; boiler, 15 ft. diameter, and all other necessary gear and fixings; the other is used for drawing, with 6 ft. stroke cylinder 32 in. diameter; boiler, 14 feet diameter, and all other necessary gear and fixings.

Also, a substantial MESSUAGE or DWELLING-HOUSE, nearly adjoining the Old Colliery, convertible at a small expense into a comfortable residence for a proprietor or superintendent of the colliery, with extensive cellars, outbuildings and offices, garden, and excellent orchard, the whole abundantly supplied with water, and now in the occupation of Mr. Thomas Fear.

A MESSUAGE and capital ORCHARD, also adjoining the Old Colliery, suitable for the bailiff or clerk, but in which an extensive retail beer trade has been some time carried on by Mr. John Palmer, the tenant. Also, a FARM HOUSE, and necessary buildings, gardens, orchards, and divers parcels of arable, meadow, and pasture lands, situate at Bishop Sutton aforesaid, containing about 90 acres, occupied by responsible tenants.

The property is situate at Bishop Sutton, in the parish of Chew Magna, which is distant from Bristol about eight miles, Bath about twelve miles, and Wells about ten miles. The custom of the colliery has been long established, is extensive and regular, yet is capable of being greatly increased. The coal raised is of first rate quality, and much esteemed in the neighbouring populous district; and it is the decided opinion of engineers and practical miners that there are other veins of coal underneath those which have hitherto been worked at Bishop Sutton. There is very little competition, and an opportunity like the present very rarely occurs to enable a moderate capitalist to embark in so safe and profitable an undertaking.

The lands are very improvable, and desirable generally for investment, and as they are the most part, lie adjacent to the colliery, they could be advantageously held and farmed with the coal works.

This property will be offered in suitable lots (of which printed particulars are ready for delivery), and may be viewed, and further information obtained, on application to Mr. W. Marshall, Bishop Sutton, near Bristol; and Mr. Marshall, solicitor, Chew Magna, near Bristol; or to treat for the purchase, by private contract, or to obtain any further information, application may also be made to Messrs. Davies and Foster, solicitors, Wells, Somerset.

**MR. JAMES CROFTS**, of 4, KING-STREET, CHEAPSIDE, MINING BROKER, OFFERS his SERVICES for the PURCHASE or SALE of MINING SHARES of every description—BARRIS and FORBES—and not being a dealer.

Mr. Crofts's weekly list comprises only such shares as he has actually on hand, or under control, but he may be consulted upon every description of mining shares, whether for purchase or sale. DIVIDEND MINES pay from 10 up to 25 per cent. per annum.

#### WEEKLY LIST OF SHARES FOR SALE.

DIVIDEND MINES.—Bedford United, Alfred Consols, Merlyn, Tremayne, West Providence, Lovell, Wheel Golden. PROGRESSIVE MINES.—South Tamar, Clive, Wheel Edward, Wood, Wheel Surprise, East Russell, North Robert, East Tamar, Great Bryn, Bodmin Consols, North Fowey Consols, Wheel Tremar, Hingston Down, Crebor, Silver Valley, East Boringdon, Boringdon Park, Okef Tor.

Mr. Crofts has made arrangements with an eminent firm on the Stock Exchange to buy or sell in SHARES and MINES as are there dealt in, without any addition to the commission charged by Stock Exchange brokers.—May 28.

**MR. JOSEPH JAMES REYNOLDS, STOCK AND SHAREBROKER.**

Nos. 23, THREADNEEDLE-STREET, and 28, NEW BOND-STREET. Most respectfully tenders his sincere thanks to the numerous friends who have hitherto favoured him with their patronage, and trusts, by adhering to the course he has at all times pursued, to merit a continuance of their support.

Mr. REYNOLDS begs to acquaint his friends and the public that he has TAKEN OFFICES at No. 28, NEW BOND-STREET, in connection with his City Offices, to suit the convenience of parties who may be desirous of PURCHASING or DISPOSING of BRITISH and FOREIGN GOVERNMENT SECURITIES, RAILWAY, MINING, and INSURANCE SHARES, together with STOCKS of EVERY DESCRIPTION.

Having been connected with the management of mines in the most productive districts of Cornwall upwards of 20 years, and being in daily communication with the most respectable mining agents in various parts of the kingdom, Mr. Reynolds is enabled to furnish such information to capitalists as may be relied on.

Mr. REYNOLDS has SHARES FOR SALE in the following MINES:—

Alfred Consols	East Wh. Rashleigh	West Providence
Anglo-Californian	Gustavus	West Devon Consols
Australian Freehold	Great Bryn Consols	West Alfred Consols
Beacon	Great W. Badden	West Stray Park
Black Craig	Levant	Wheel Seaton
Bedford Consols	Mendip Hills	Wheel Anne
Carn Brea	North Pool	Wheel Golden
Carons Creek	Okef Tor	Wheel Edward
Conduarrow	Pendarves & St. Aubyn	Wheel Surprise
Carvannal	Peter Tavy	Wheel Hamlyn
Clive	Rocks & Treverbyn	Wheel Gili
Cook's Kitchen	South Conduarrow	Wheel Catherine
Court Grange	Sidney Godolphin	Wheel Lemon
Cupid	Spears Consols	Wheel Tryphena
Cwm Erda	Tincroft	Wheel Samson
Daren	Trevelyan and Barrier	Wood Mine
Devon Barra Barra	Trevena	Wheel Victoria
East Black Craig	Unity Consols	Wheel Vanton

SHARES WANTED in South Frances, Devon Consols, West Wheel Seaton, East Pool, Wheel Reeth, West Treasury, and Castle Dinas.

**MESSRS. FRANCIS & LIGHTOLLER, MINING AGENTS**

AND CIVIL ENGINEERS.

OFFICE.—No. 34, EXCHANGE ARCADE, MANCHESTER.

Messrs. FRANCIS and LIGHTOLLER, may be CONSULTED by MINING COMPANIES and OTHER PARTIES requiring INSPECTIONS and REPORTS on MINES of every description, or by CAPITALISTS and OTHERS desirous of INVESTING their CAPITAL in MINES or OTHER MINERAL PROPERTIES.

Statistics and other general information connected with Mines and the Mineral Districts given or obtained with the utmost dispatch.

Capt. Absalom Francis having had upwards of 30 years' experience in the practical management of mines, and reported on most of the principal ones in the United Kingdom, applicants may rest assured they will receive full and satisfactory information on matters connected with mining.

Architects, and contractors for the erection of engines and every description of mining machinery.

**GENERAL MINING AND MINE REPORTING OFFICES,**

1, CROWN-COURT, THREADNEEDLE-STREET, CITY.

Messrs. M. FRANCIS & CO., MINING BROKERS, appreciating the desideratum of PROVIDING the most AUTHENTIC INFORMATION respecting BRITISH & FOREIGN MINES for those who desire to INVEST SAFELY, have OPENED this OFFICE for the REGISTRATION AND CLASSIFICATION OF THE DIVIDEND-PROMISING AND WORKING MINES.

Their REGISTER will be found a VALUABLE INDICATOR, as, from more than twenty years' experience in the successful selection and management of mines, they can confidently advise, so as to insure the most certain and remunerative returns.

\* Shares Purchased and Sold—Mines Inspected, &c.

**MESSRS. FRANCIS & CO.**, in order to avoid the complicated and indefinite system of CALLS for working or proving mines, consider that a better and more satisfactory one will be found in offering the public those chiefly in which the machinery and underground work required to bring them into a state of profit has been completed and paid for.

In mines thus far advanced, it will be obvious that as there will be no risk, so there can be no necessity for calls—the speculative part of the adventure having been gone through; and in this way capitalists will be enabled to invest with the certainty of immediate returns.

Mr. MATTHEW FRANCIS takes leave to announce, that he has several THOUSANDS OF POUNDS WORTH OF SHARES TO DISPOSE OF, which, at the selling price, give a profit of from £20 to £40 per cent.

\* Offices, No. 7, John-street, Adelphi, London.

**MINES IN IRELAND.—MR. HENRY ENGLISH, F.G.S.**

having RETURNED from his SECOND VISIT to the MINING DISTRICTS of IRELAND, purposes RETURNING to the SISTER ISLE in the course of a FEW DAYS, with the view of further INVESTIGATING and REPORTING on MINING OPERATIONS.—Any communications addressed to his offices, 25, Fleet-street, or to that of the Mining Journal, will receive ready attention.

Mr. ENGLISH having been employed by the Commissioners under the Incumbered Estates Court, and having on numerous occasions visited the several mining districts of Ireland, considers himself competent to any survey or investigation which may be entrusted to him.

**MINES.—JAMES S. TRIPP AND CO. have on SALE**

SHARES in the best DIVIDEND-PAYING MINES of CORNWALL and WALES—to pay the buyer from 20 to 25 per cent. They have also SHARES in MINES fast approaching to dividend-paying concerns, which, at present prices, they can recommend to capitalists as safe and lucrative investments.—Lombard-street Chambers, 33, Clement-lane, Lombard-street. ESTABLISHED 1839.

**MINING RECORD OFFICE, 26, AUSTINFRIARS, LONDON.**

MR. MANUEL'S OFFICES are expressly for the USE of COMMITTEES and COMPANIES conducting their BUSINESS in LONDON, and is entirely free from all arrears. MR. MANUEL will be happy to CONDUCT the LONDON AGENCY of any MINES now at work, or about to be worked, he having spacious and convenient OFFICES for that PURPOSE.—Terms on which the business is conducted to be had on application, either by letter or in person.

Sixteen years' experience will enable Mr. Manuel to give suitable advice on all occasions.—Offices of the West Wheel Ross, West Callington, Busparro, Gally-y-Maen, Great Grinnis Consols, &c.

**MINING INVESTMENT.—T. FULLER and CO., No. 51,**

THREADNEEDLE-STREET, LONDON, beg respectfully to inform the public that they are in a position at all times to BUY and SELL in all DIVIDEND-PAYING MINES, both British and Foreign, most of which will pay from 15 to 25 per cent., and have on hand shares in several mines of great promise, approaching to a dividend state.

T. FULLER and CO., being in daily communication with the most respectable mining agents of Devon, Cornwall, and Wales, are able to furnish such information as may be relied on. Business transacted in the AUSTRALIAN and CALIFORNIAN GOLD MINING COMPANIES, and every information given either personally or by letter.

WANTED TO PURCHASE.—Wheel Arthur, East Wheel Reeth, Wheel May, South Wheel Russell, and Wheel Zion.—Office hours, from Ten till Four.

**MINING INVESTMENT.—MOLYNEUX and CO., No. 34,**

THREADNEEDLE-STREET, CITY, and No. 10, BUCKINGHAM-STREET, ADELPHI, LONDON, have constantly on SALE, and OFFER their SERVICES for PURCHASE of, all CORNISH and DEVON MINING SHARES, and in all GOLD COMPANIES.—Offices for the Trebell Consols, Great Wheel Tonkin, Wheel Fortune, and other prosperous mines.

**MESSRS. TREDINNICK and CO., STOCK, SHARE, AND MINING BROKERS, No. 6, HAYMARKET, PALL-MALL, LONDON,** continue to NEGOTIATE every description of BUSINESS connected with the ABOVE SECURITIES.—Messrs. TREDINNICK & CO. OFFER their SERVICES to CAPITALISTS with every confidence, in the SELECTION of MINES for INVESTMENT—their long and intimate acquaintance with the best mining districts, coupled with the establishment of agents throughout Cornwall and Devon, give them many advantages in having correct and authentic information of the character and value of mining property.

DIVIDEND MINES, well selected, paying 15 to 25 per cent. per annum upon the current value of shares.

**MR. T. P. THOMAS, MINE AGENT, 75, OLD BROAD-STREET.**—Established nine years.—Mr. T. P. THOMAS begs to inform capitalists and the public that he is at all times in a position to BUY or SELL, at close market prices, in dividend and respectably established BRITISH and FOREIGN MINES; and having a local knowledge of the principal Cornish and Welsh Mines, from periodical personal inspection, &c., will be happy to furnish information by post or otherwise.

N.B.—Mines inspected and reports furnished.

**MINING PROPERTY.—MR. HERRON has SHARES in**

the best DIVIDEND-PAYING MINES FOR SALE, and which will give the purchaser 15 to 20 per cent. for the outlay. Amongst others are the following:—

West Caradon	St. John del Ray	Trampet Consols
South Caradon	West Providence	Botallack
South Basset	Tincroft	Cobre
West Buller	South Frances	Merlyn
Great Devon Consols	Bedford United	South Tolgas
		United Mines

And has also FOR SALE SHARES in MINES having a PROMISING APPEARANCE, and affording greater range for speculation, such as—

Celia Brano	West Towan	Tokenbury
East Daren	Tywardreath	Trolawny
South Tamar	Clive Mary Ann	Treleigh
Hingston Down	Kilbricken	North Downs

Mining Offices, 33, Clement-lane, Lombard-street.

**MINE SHARES.—MR. J. H. MURCHISON has SHARES**

FOR SALE in MINES in CORNWALL and DEVON, of great promise, and in full operation, including Wheel Crebor, Boringdon Park, East Boringdon, Caradon Wood, Wheel Fanny, Wheel Williams, East Wheel Russell, North Wheel Robert, West Goginan (Wales), &c. Copies of the most recent statements of accounts and reports may be obtained on application.—38, Threadneedle-street, London.

**SHARES FOR SALE in the following MINES:—**

150 London and Sidney, at	5s. 6d.
100 East Black Craig, at	7s. 6d.
25 Okef Tor, at	12s. 6d.
25 Wheel Augusta, at	21s. 6d.
50 Great Cowarth, at	22s. 6d.

Apply to Mr. J. H. MANDEVILLE, 22, Change-alley, Cornhill.

**MR. ROBERT TRIPP, MINING AGENT, has FOR SALE**

SHARES in the best DIVIDEND MINES, which will pay the purchaser 15 to 25 per cent. per annum, including Devon Great Consols, Trevelyan and Barrier, West Caradon, Wheel Reeth, Wheel Margaret, Conduarrow, Alfred Consols, West Providence, Tincroft, Tamar Consols, Wheel Trelawny, Mary Ann, Wheel Tremayne, Carn Brea, Merlyn, South Frances, St. Aubyn and Grylls, &c. and in others about to pay dividends—viz., Wheel Harriett, West Ding Dong, Lemon, Cubert, Venton, Garreg, South Carn Brea, Penbroke and Crinnis, West Treasury, Kilbricken, East Wheel Margaret, Llanar, St. Michael's Chambers, St. Michael's-alley, Cornhill, London.

**MR. GEO. CARNE, DEALER IN STOCKS AND SHARES,**

28, THREADNEEDLE-STREET, LONDON.

**MR. JOHN DAVIES, MINING SHAREBROKER,**

No. 17, EXCHANGE-ALLEY NORTH, LIVERPOOL.

**MR. BELL WILLIAMS, MINE AGENT AND VIEWER,**

No. 10, CASTLE-STREET, LIVERPOOL.

**MR. MASSEY, BULLION AND FOREIGN MONEY**

EXCHANGE OFFICE, No. 116, LEADENHALL-STREET, LONDON, PURCHASES, by sample, GOLD and SILVER ORE, in quartz, or any other metal, GOLD DUST, &c.

**MR. ALFRED SENIOR MERRY, DEALER in COBALT**

AND NICKEL ORES, AND ASSAYER in GENERAL.—Address: LEE-CRESCENT, BIRMINGHAM.

**MR. THOMAS EDINGTON, INSPECTOR OF RAILWAY**

CASTINGS, &c.—No. 17, Gordon-street, Glasgow.

**GOLDENHILL COBALT, NICKEL, COLOUR, AND**

CHEMICAL WORKS, NEAR NEWCASTLE, STAFFORDSHIRE.

JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER.

Reference.—Professor Miller, King's College, London.

**LOSH, WILSON, AND BELL, NEWCASTLE-ON-TYNE,**

MANUFACTURERS OF BAR-IRON, RAILWAY BARS, FORGE AND ENGINE WORK, CAST-IRON GOODS, AND STEWART'S PATENT CAST-IRON GAS AND WATER-PIPES. OFFICE.—7, SISE LANE, LONDON.

**RAILWAY WAGONS.—WILLIAM A. ADAMS,**

MIDLAND WORKS, BIRMINGHAM.

BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS,

IN STOCK—FOR SALE OR HIRE.

**CWMDYLE ROCK AND GREEN LAKE COPPER MINE,**

NORTH WALES.—TO MINING CAPTAINS.

WANTED, for this Mine, a CAPTAIN, qualified to take the MANAGEMENT of one who is acquainted with the French language will be preferred.—Address (with testimonials as to qualification and amount of salary expected) to the Purser, 2, Scott's-yard, Bush-lane, Cannon-street, London.

**WANTED.—A SITUATION as VIEWER, or GROUND**

BAILIFF, at a COLLIERY, by a middle aged Person, who has had many years' practice in the county of Durham. He is thoroughly acquainted with the best modes of working, ventilating, &c., and also has had much practice in surveying, mapping, &c. Satisfactory references will be given.—Address "A. B. R." care of the Editor of the Mining Journal, 26, Fleet-street, London.

**WANTED.—An ENGINE, complete, capable of pumping**

from 70,000 to 100,000 gallons of water per hour; the lift to be from 15 to 20 ft.—Apply by letter, with specification and price, to Mr. James Edwards, jun., public accountant, 3, Lower Park-row, Bristol.—May 24, 1852.

**VALUABLE COPPER AND LEAD MINES TO BE LEASED,**

extending over an area of 5000 acres.—For particulars apply to Mr. White, No. 19, Adam-street, Adelphi, London.

**LEAD MINE.—TO BE LET, a valuable LEAD MINE,**

on the property of William C. Quinn, Esq., in the county of ARMAGH, in IRELAND.—Apply to Messrs. Stewart and Kincaid, land agents, 6, Leinster street, Dublin; or to R. T. Nevill, Esq., Llanelli Copper Works, Carmarthenshire, under whose direction the preliminary trials have been made.

**FOURDRINIER'S SAFETY APPARATUS.—TO BE**

SOLD, A PAIR of very POWERFUL APPARATUS, under this Patent, made for two pit cages, and to lift any weight not exceeding four tons on each side.

Address by letter only, to "R. N." care of Mr. Deacon, advertising agent, Board-court, Walbrook, London.

**URANIUM ORE.—SALE BY TENDER.—A QUANTITY**

of about 6000 lbs. Austrian weight, lying at the AUSTRIAN IMPERIAL MINES, at JOACHIMSTHAL, in BOHEMIA, is TO BE SOLD, BY TENDER, to the highest bidder. Tenders to be sent in, before noon, on the 30th June next, to the "Board of the Imperial Mines," at Vienna.—Full particulars as to the conditions of sale, &c., may be had on application to Messrs. Aug. Faber and Co., merchants, 60, Mark-lane, London.

**SILVER VALLEY AND WHEEL BROTHERS MINING**

COMPANY.—TO SILVER SMELTERS.—TENDERS will be RECEIVED, at the Company's Offices, for the PURCHASE of SEVEN TONS and upwards of SILVER ORE, samples of which may be had on application to Mr. Fry, at the mine, Callington, Cornhill.—Nett price, free of returning charges, required. By order, WILLIAM LEE, Secretary.

**TO GENTLEMEN CONNECTED WITH MINING.—**

The Advertiser (a practical Cornish miner) can with confidence RECOMMEND the SETT of a valuable MINERAL PROPERTY, well worthy of attention, and from which thousands of tons of COPPER ORE of high produce have been returned from a depth of only 60 fathoms under adit, and the operations in which were stopped, in consequence of circumstances arising out of exhaustion, when the monthly returns were about from 90 to 100 tons, of a produce varying from 15 to 30 per cent.

It is considered that, after the erection of an engine and other machinery

## LITERARY NOTICE.

*Free Production having Free Trade! the Pressure of Taxation Exposed, in a Lecture delivered in the University of Cambridge, with an Application of the Principles to the Present Crisis.* By THOMAS BANFIELD, Esq., author of "Six Lectures on the Organization of Industry," "Industry of the Rhine," &c. London: Ridgway, Piccadilly; and Eppingham Wilson, Royal Exchange.

The influence taxation exerts upon the industry of a country is a legitimate and most interesting point of inquiry. The author of this pamphlet is no stranger in the practical fields of mining and trade, although he was honoured with a chair at one of our leading universities, at a time when continental theories threatened confusion to our social organization, and were making rapid converts, even amongst men of scientific reputation. This lecture is one from a series delivered in 1848, on the "Organization of Industry," in refutation of the doctrines of Proudhon and Louis Blanc. The whole work has been translated into French, and is, in France, acknowledged to have solved some of the chief difficulties of that absorbing question. A thorough going free trader, Mr. Banfield still looks upon free trade as but one link in the great industrial chain. Having attained so great a boon, he recommends freeing the fixed capital of the country from all special and local taxation, for which he thus pleads:

"Fix your burdens upon production in its earlier stages, by taxing capital fixed and circulating, or by restricting the plan of ingenuity or the calculations of industry, and neither the talents of a people like the French, nor the climate and soil of a country like India, will return a revenue that pays the cost of its collection. In the one case, too, you have riches and contentment—in the other, discontent and insurrection. From want of sufficient care in distinguishing accurately the sources of revenue, we have in England burdened ourselves in a manner which few imagine to be as serious as can easily be proved. Capital embarked in trade, or circulating capital, is now but in few instances subjected to a tax before the consumer meets the producer. The exceptions are, however, serious, although not numerous, and the mischievous tendencies of malt and spirit duties are exposed at some length in the lecture. Fixed capital, on the other hand, has been made a subject of taxation to a lamentable extent, owing to the gradual growth of the notion that the bulk of the people pays all taxes indirectly imposed." The simple fact that wages and profits must both be paid out of revenue, and will both be greater where capital most abounds, is overlooked by such as hold this opinion. This oversight has even recently been committed by a professed political economist (Mr. John Mill), who recommended in terms a spoliation of capitalists, in the mode adopted in France in the last century, as the true remedy for an insufficient revenue, or want of means to pay high wages. Such doctrines, united with those which would substitute an equal division of revenue for efforts to increase the general revenue, are the true cause of the stagnant condition of society in this and in other European countries. Where such notions are taught as scientific maxims, it was needless to expect that nice distinctions in matters of finance would be detected or heeded. Accordingly, the distinctive effect of taxes imposed on fixed property has never yet been placed in its proper light. Taxes levied on fixed capital diminish not merely the revenue derived from the capital so taxed by the amount of the impost. They likewise depreciate the market value of the capital itself. Were the sums now paid by railway companies to the Excise office, and in the shape of parish and county rates, added to the yearly dividends, the shares would, of course, stand as much higher in the market as amounted to the rates capitalised at the current rate of profit. Factories, docks, canals, warehouses, dwelling-houses, and all other building investments are now proportionately depreciated in value by the local rates imposed upon them. Nor is the land of the country exempted from the rule which applies generally to fixed capital. Its value would be increased by a sum equivalent to the capitalised amount of all the special burdens affecting land at the current rate of interest. Let us inquire what this would amount to.

The local rates levied in counties and corporate towns in England, exclusive of poor's rate, has been estimated at.....	£14,000,000
The same for Ireland.....	1,400,000
The same for Scotland.....	900,000
Poor's rate, England.....	£5,500,000
Do, Ireland.....	1,100,000
Poor's assessment, Scotland.....	400,000
House duty.....	200,000
Railroad licenses.....	280,000
Tithe rent charge.....	3,500,000
	£27,280,000

If we capitalise the above revenue at even 5 per cent., it amounts to £540,000,000. By the loss of this sum, the capital fund of the country is reduced, and the owners of fixed property are disabled from giving employment to labourers of all classes. To prove the truth of the proposition here advanced, it will be only necessary for a Chancellor of the Exchequer, who has studied the subject, to throw all local and special imposts upon the general budget. By emancipating fixed capital from this thrall, the value of land, buildings, roads, railroads, in short, of all constructions, would at once increase in the proportion above stated. The disposal of such a sum as £540,000,000, would enable the landowner henceforward to command the use of machinery and agricultural processes, by means of which the production of the country would be greatly increased, agricultural activity promoted, and thus plenty would accompany good wages."

It is clear that the mill owner and proprietor of all taxed stock would see his capital increased in value in a similar proportion to the landowner. The neglect of this principle in dealing with Ireland during the late famine is shown to have added to the sufferings of that unhappy people.

"But in Ireland, where this division (of labour) was as much wanted, the imposition of a rate diminishing the value of capital in a year of scarcity, that is to say, when the land yielded no surplus produce, produced exactly the contrary effect. The poor's rate impoverished the landowners, rendering them less able to give legitimate employment to labour than they were before the tax was imposed. It further limited the labour market by necessarily throwing out of cultivation all lands which until then have been tilled for the return of a bare subsistence. Thus the legislative enactments of 1848 and 1849 form a dark page in our parliamentary history. They are creditable to those who framed and supported them. They carried ruin and starvation in their train. The tale told by the recent census, imperfect as are the data upon which it is founded, and probable as it seems that the whole loss in lives is not revealed, is unparalleled in the modern history of any civilised state."

"The whole interest of the national debt (£7,300,000,000) is paid by six taxes, which fall at this moment upon the lowest class of the community—the tax on tea, sugar, coffee, spirits, malt, and on tobacco; these six articles raise a revenue of above £9,000,000, sterling. The whole civil Government of this country does not cost £9,000,000, less than the interest of the national debt. If you are to transfer the burden from the land to indirect taxation, you, in fact, impose it upon the people.—Sir James Graham at Carlisle."

**AMSTERDAM WATER-WORKS.**—In the Journal of the 8th May we published a paragraph, very prejudicial to the Amsterdam Hill Water works Company, professing to be founded on a statement published in the *Handelsblad* of the 30th April, but we have had a copy of that paper furnished us, in which, we are bound to acknowledge, nothing appears in reference to that undertaking. In the *Handelsblad* of the 1st May, however, appears a notice (of which we subjoin a copy) representing the Hill Company to be satisfactorily progressing with their works:—

*Haarlem, April 29, 1852.*—On Tuesday last an accident occurred at the Hill Water-works. Owing to some derangement in the train line, one of the cars filled with sand began rushing backwards along the line, and was precipitated with immense velocity down the descent, where, unfortunately, half a dozen horses were at the moment standing, of which two were seriously maimed and killed upon the spot. The continuance of dry weather, although favourable to the prosecution of the works, furnishes, however, proofs that the supply of water will not be so abundant as was anticipated in the commencement; the laying down of the pipes is progressing with great speed.

The first meeting of shareholders of the Duin Water Maatschappij was held at Amsterdam on the 19th inst., when the directors gave the following particulars of the progress of the works of the company:—"Owing to the mild winter, the works at the 'Orange' Reservoir, or Gathering Basin, in the hills at Leiduin, beyond Haarlem, have been vigorously and uninterruptedly proceeded with since the first sod was turned by the Prince of Orange on the 11th November; and at the present time, 80,000 cubic feet have been excavated from this basin, which is to be capable of containing 35,000,000 gallons. The canal into the hills, which is to connect this with the other basins to be formed in the Zwartefeld and Bore-water valleys, has also been commenced. The excavations for the engine-house foundations are in progress, and will shortly be ready for the masonry. The laying of the main pipe towards Amsterdam is proceeding with great rapidity—2583 yards being already in the ground; and the directors have the assurance of the contractors that the main will be completed, and the water, consequently, delivered to Amsterdam, in the course of the ensuing winter. The great drought which has prevailed of late has served to prove the supply of water to be derived from the springs in the Haarlem hills to be inexhaustible; and its excellent quality, so often demonstrated by analysis, has been quite recently attested by Mr. Herapath, M.D., the well-known analytical chemist, who corroborates the universal opinion of its fine quality rendering it fit for drinking and every domestic purpose."

**CANALISATION OF THE EBRO.**—A company has recently been formed for carrying into operation a concession, granted by the Cortes of Spain for the construction of canals, as proposed by M. Jacob, Inspecteur des Ponts et Chaussées, in France, from the Ebro at Saragossa to Amposta, and from Amposta to the seaport of Alfacques—the distance being 280 miles. To accomplish this, a capital of 1,280,000l. is proposed to be raised, in 60,000 shares of 21½l. each, issued at 16l., with a guarantee from the Spanish Government of 6 per cent. on the nominal amount, being 8 per cent. on the amount paid, with the advantages for 99 years of the exclusive navigation of the Ebro; levying dues on passengers and goods, and on all land irrigated by the river or canal; the freehold of all land reclaimed; the rights of pasture and plantation on their banks; and the freehold right to all water power. The total sum estimated for the works, and the purchase of the necessary steam-boats, is 960,000l.; the remaining 144,000l. is considered more than sufficient to cover the outlay for steam-boats and the general expenses of the company. The estimated income, without taking into consideration the waterfalls, is 353,800l. per annum; and taking all expenses at 63,800l., a clear return will be secured of more than 30 per cent. The liabilities are limited to the amount of shares held; and the contractors have undertaken to complete the first section from Charta to the sea in 18 months, which will alone produce a large income, and the whole to be finished in four years.

**HOLLOWAY'S PILLS AN EFFECTUAL REMEDY FOR GOUT AND RHEUMATISM.**—Extract of a letter from Mr. W. Moon, at Messrs. Godwin's, auctioneers, Winchester, dated April 3, 1852:—"To Professor Holloway.—Sir, I beg to inform you that for years I was a sufferer from chronic rheumatism, and often laid up for weeks together, unable to move. I was attended by the most eminent surgeons here, but obtaining no relief, was induced to go into our County Hospital. The medical treatment there, however, being of no avail, I left, and commenced using your pills, which, I am happy to say, in a short time effected a perfect cure, and enabled me to resume my employment."—Sold by all druggists, and at Professor Holloway's establishment, 244, Strand, London.

## AMERICAN MACHINERY.

An American writer, in a sketch of the works in progress at the principal iron foundries, says there are no foundries in England which cast such massive pieces of machinery as those executed in New York; and, in proof of this, describes the operations of several of the principal firms. Twelve iron columns, cast by Messrs. Mott and Ayres, of the Chelsea Iron-Works, for the Manhattan Gas Company, are the largest ever cast by 10 ft. 8 in., measuring 50 ft. 8 in. in length, 8 ft. in diameter at the base moulding, 2 ft. at the top moulding, and weigh 27,300 lbs. each; they have been erected about the gasometer, and are surrounded by girders 45 feet in length. They were also preparing an iron steamer for a passenger boat on the Magdalena River: her hull is of iron, rivetted together, and the deck is composed of white pine: she measures 167 ft. in length on deck, 30 ft. beam and 7 ft. hold, and is calculated she will carry 70 tons, while drawing only 2 ft. 9 in. of water, which will show great buoyancy in a vessel of that description: when heavily loaded she will carry 330 or 350 tons.

**ERICSSON'S CALORIC ENGINE.**—Messrs. Hogg and Delamater, of New York, are principally engaged in constructing this engine, which is a mammoth combination of machinery. It has very heavy pieces of metal, the cylinders, four in number, being 14 ft. in diameter, and about 8 ft. in depth: three of these massive tubes have been cast, and are quite a curiosity. The engine will have no boilers, and no water will be used to drive it, the propelling agent being heated air, which, by the devices, substances, and arrangements of the machinery, is saved. The piston is 8 ft. stroke. The principal advantages claimed by the inventor over other engines are economy of fuel and safety. The regenerators are arranged in single vessels, and the metallic substances contained therein take up the caloric from the air which leaves the working cylinder, or vessel, and returns the same to the air that enters the working cylinder at each stroke. The regenerators will alternately take up and give out caloric, by which the circulating medium will chiefly become heated, independently of any combustion, after the engine shall have been once put in motion.

Mr. Milligan, of the Warren-street Foundry, had invented what he calls the "vertical fire boiler," patented there and in England: the construction of this boiler is such that double the quantity of fire and surface can be brought in the same compass over the other boilers now in use, and it is claimed to be more effectual. All other boilers have horizontal flues and vertical tubes: one advantage is a boiler half the ordinary size, taking less room, and, of course, requiring but half the quantity of water. The strength of the fire acting on the surface of the water has the effect of making steam with less fuel. In making the steam at the top of the flue it escapes more rapidly into the chamber. He was completing a boiler of this description for T. Surrall and Co., to be used in their moulding and planing mills, with an engine 100-horse power: the boiler is 15 ft. long, 7 ft. wide, and 9 ft. in height.

Cunningham, Belknap, and Co., of the Phoenix Foundry, are fitting the boat General Taylor with a condensing engine, 70 in. diameter of cylinder and 14 ft. stroke of piston, and four boilers.

Mr. Rodney, of the City Foundry, besides several large engines for steamships, had recently completed four engines and stamping mills for quartz crushing in California.

George Birbeck had finished the machinery for a harbour towing boat, called the *Peter Cary*: the engine is 22 in. diameter of cylinder and 6 ft. stroke of piston. Also, the machinery for a barge, belonging to Griffith and Tillinghast: she takes a condensing engine, 26 in. diameter of cylinder and 26 in. stroke of piston. Also, two 7½ ft. propellers, with boilers to match. Putting machinery in barges is a new experiment. Barges have always been towed by the steamboats and propellers in use for that purpose, but some of the transportation companies contemplate fitting their barges as the one above. By the adoption of this plan quicker passages will be made up and down the river, and freight will command a better price.

Charles Morgan, of the Morgan Iron-Works, besides two beam-engines of 72 in. diameter of cylinder and 12 ft. stroke of piston, for two boats on Lake Erie, was constructing a 44 in. diameter of cylinder 11 ft. stroke beam-engine for an iron vessel, to be built in Vienna, for the Danube Steamboat Company.

Lecor and Breasted, of the Allaire Works, had on hand orders for a pair of marine beam engines, 60 in. diameter of cylinder, 10 ft. stroke, for C. Vanderbilt's Nicaragua route. They were also constructing a marine beam-engine, of 65 in. diameter of cylinder and 10 ft. stroke, for the Californian trade, to run from New York to Chagres.

## CALIFORNIA—QUARTZ CRUSHING AND MINING.

A correspondent says—"Since I last wrote from Sacramento City, I have made a trip through the whole of the mining region, and have everywhere been astonished at the amount of labour performed by the miners, in their efforts to secure the precious metals. It is somewhat remarkable the first explorers for the gold placers, in 1849 and 1850, should have stumbled on the richest places, and obtained results which have not since been surpassed; yet, since then, great discoveries have been made, and quartz mining has not only aroused capitalists abroad, but is here regarded as the source of wealth from which California is to supply the world with gold. The discoverer of a mine is entitled to hold it, and by the discovery becomes its lawful owner, subject to such regulations as Government may hereafter adopt. Not less than 80,000 persons are directly or indirectly in the placer washings, for this kind of gold hunting requires nothing but a robust constitution and strong determination: it is labour of the severest kind, and tries the endurance of the strongest individual—nor does it require any capital, and, consequently, all who come into the country in quest of fortunes hasten to the placer washings, and from the result there obtained they have the necessary means to engage in some other; or, what has been more generally the case, they direct their attention to the quartz rock."

By the 1st May there will be no less than 75 engines in the gold region—or, at least, arrangements are made for so many during the course of the summer. What the effect of these facilities in the extraction of the gold is to have upon the currency of the world is left for others to determine. Little more than a year ago there had been but few discoveries in the quartz veins, because all the people were attracted towards the placer washings; but this is not now: all along the Grass Valley Mines, in the northern section, above Sacramento, large deposits of the quartz vein have been found, and to which machinery is now being applied. This rock is said to yield from \$100 to \$300 per ton; and from the experiments which have been made there can be no doubt it is placed at a low average. But thus far the southern mines have been found the most profitable and extensive, and from what has already transpired, the source seems inexhaustible: many of the veins are large and plainly discernible; some are convenient to wood and water—others where they cannot be worked for the present at an advantage. You can sometimes see the gold in the quartz ledges exceedingly rich, but generally here and there a speck indicating its being a genuine gold-bearing rock.

In opening the mines, needs have been found, and to which machinery is now being applied. This rock is said to yield from \$100 to \$300 per ton; and from the experiments which have been made there can be no doubt it is placed at a low average. But thus far the southern mines have been found the most profitable and extensive, and from what has already transpired, the source seems inexhaustible: many of the veins are large and plainly discernible; some are convenient to wood and water—others where they cannot be worked for the present at an advantage. You can sometimes see the gold in the quartz ledges exceedingly rich, but generally here and there a speck indicating its being a genuine gold-bearing rock. It is my opinion the average yield of the quartz vein will prove to be almost from 5 to 10 cents per lb. in gold. I am now speaking of the whole rock broadcast. The veins in this country vary from 3 feet to 20 feet in thickness, taking their dip downward to unknown depths, probably richer in metal as they go down. An engine of 20-horse power, with heavy Virginian stamps, and other machinery, is scarcely of use; stamps weighing from 500 to 700 lbs., 12 in a battery, will crush almost 5,000 lbs. of ore per day, taking four cords of wood daily, and sufficient water for steam and washing over; by increasing the power of your engine, you can do much more, and at a greatly diminished expense. Many of the companies are constructing machinery calculated to crush four times the amount of ore in a day I have specified, but I have made the calculation moderate, preferring to be under than above the mark. If you ask me my opinion about sending out the machinery, and the necessary means to prosecute the mining of the quartz rock, I must decidedly say yes. Capital can nowhere on earth be so advantageously employed as in this kind of labour in California; but it is necessary you have competent and trustworthy agents and employers, if you do not superintend the operations yourself. Yet there is a great mistake in the minds of some people, that labourers here in the quartz veins retain much of the gold, and defraud the employers or owners of the mine, for, every instance where I have made inquiry of the superintendent how he prevented the loss of gold by the workmen, I have been assured they had no difficulty; and, again, the most fanciful impressions prevail about the hardships all expect to endure here. No greater folly can exist: the country has only the disadvantages incident to all new countries; the climate is delightful, travel in the summer months in the country pleasant, and the roads good. In the winter months the roads are heavy from the rains, and the travelling, except by steamboat, disagreeable. In San Francisco you can already get every luxury the most fastidious can desire; while Sacramento City and Stockton—the depot of the northern mines, and the place of transit for the southern mines—are large and thriving cities, bounding in all the fashions of the day. While mining is, and always must be, the great element of prosperity for California, yet the soil is fertile, and the agriculturist nowhere can find a surer or more profitable return for his labour. A great mistake also prevails abroad about the security of person and property: every right-minded citizen feels the responsibility of doing all he can to protect each man in the enjoyment of his earnings, and the necessity of the determined course pursued by the citizens of San Francisco in ridding themselves of the desperate characters who were attracted there in the hopes of pillage, would be readily excused by any of the strictest friends of order, if they had been present, but such necessity no longer exists: the law is enforced, and each man secured in his personal rights."

**THE SUSPENSION-BRIDGES OF NIAGARA.**—There are two great bridges crossing the Niagara—one is a surprising work; and as we slowly drove over and looked up and down upon the river, 230 feet below us, we appeared as if moving upon a cobweb in the air, so light and fragile in appearance is this structure of iron wire. This bridge is 764 ft. span, and 230 ft. above the surface of the river: its towers, which are of timber, are 55 ft. high; the weight of iron used is 35 tons; and the weight of flooring suspended 40 tons: there are 1767 (No. 10) wires used. The other bridge is 1040 ft. span, and 19 ft. wide; so that three carriages can pass abreast, leaving a wide footpath on each side. Its flooring is suspended by 10 cables of 250 wires each—the cost, I was informed, only 16,000l., which seems an extremely small sum: and it has earned 4 per cent. on this sum in the few months it has been opened. These bridges have a larger span than any others in the world.—*Watkin's Trip.*

## NATIONAL BANK OF IRELAND.

The 17th annual general meeting of shareholders was held on Wednesday, the 26th inst., at the offices of the company, Old Broad-street, OCTAVIUS O'DONNELL, Esq., in the chair.

The report was read by the SECRETARY, and was as follows:—

The directors have much pleasure in again meeting the proprietors, and in submitting to them, as usual, their annual report of the result of the operations of the bank for the past year, and of its present position. In their last report the directors remarked that it was apparent from the accounts then presented, "that the National Bank of Ireland stood high in the estimation of the public, and possessed within itself all the elements of prosperity." These facts are fully substantiated by the balance-sheet of 1851, to which, although emigration has not only continued unabated, but even increased among the better classes of the community, and notwithstanding a much greater employment for capital has sprung up from various causes, yet the amount of circulation and deposits remains nearly the same as at Christmas, 1850, while the proprietors will not fail to remark that the accommodation which the bank has been able to afford to the public has been materially increased, the amount of bills discounted being, at the close of the year just past, nearly a quarter of a million more than at the same period in 1850.

This expansion of the means of the bank has not been occasioned by the slightest departure from a rigid attention to the safety of the business transacted, and although some disastrous failures have occurred in the south of Ireland, the directors are happy to say that this bank has almost entirely escaped them. Indeed, the anxious desire of the board has invariably been to meet every reasonable application from its customers, but not to encourage wild speculation. Acting upon this uniform system of liberality, exercised with care and discrimination, the result has proved beneficial to the proprietors, and the directors consider themselves justified in inferring from the increased accommodation thus proved to be required for the legitimate business of the country, that the distress so long felt, and which for a time so sensibly impaired the energies of the people of Ireland, is at last giving way before their wonted enterprise and activity.

The very low rate of interest which prevailed throughout the year has necessarily and materially curtailed the profits of the bank, notwithstanding its increased business; and as the only means within the power of the directors of counteracting a disadvantage common to all banking operations, they have devoted their strictest attention to economy, and have effected every reduction in the expenses of the establishment which an efficient management will admit of. They have likewise thought it right to close the Roscrea, Kibberville, and Westport branches, those offices having proved unremunerative. It is a source of much regret to the board to be compelled to deprive any locality of the banking accommodation to which it has been accustomed, or to inconvenience those who have proved themselves friends of the bank; but the interests of the shareholders, who run all the risk, must and ought to be the first and paramount consideration. Since the last general meeting, every branch has undergone a rigorous inspection; and from the satisfactory state of management in which they have generally been found, coupled with the greater facility which railroads now afford for speedy communication, the directors considered that they might safely diminish their staff of inspectors, and they have appointed Mr. M'Mullen, lately one of them, to the management at Waterford.

The directors having found that the form of accounts, as presented at the last general meeting, obtained the approbation of the proprietors, beg to continue them on this occasion on the same plan. The first statement is that of profit and loss:—

The undivided profits at December, 1850, were .....	£2,055 16 11
Fund for doubtful debts .....	30,000 0 0
Insurance fund .....	8,000 0 0
Nett profits for the year 1851, after providing for the bad and doubtful debts of that year .....	£2,025 16 11
Total .....	£51,339 3 8

Leaving amount at credit of reserve fund at December, 1851 .....

Government Stock, Exchequer Bills, cash on hand, and at bankers .....	£ 567,975 5 11
Bills discounted, loans, and advances on current account .....	1,692,626 3 8
Doubtful debts to Dec. 31, 1851, against which a sum of 5886½ l. is held as a fund per contra .....	99,163 16 9
Bank premises—London, Dublin, and branches .....	28,667 19 10
Total .....	£2,308,433 6 2

Paid-up capital—London stock .....	£450,000 0 0
Local stock .....	21,197 10 0
Circulation .....	684,504 15 0
Due by the bank on deposit receipts, current accounts, &c. ....	1,138,793 14 2
Fund for doubtful debts .....	30,000 0 0
Insurance fund .....	5,386 11 4
Reserve fund .....	5,494 18 4
Total .....	£2,308,433 6 2

To which details the directors have nothing to add, except that the proprietors will observe that of the doubtful debts, for which a provision was made in the last accounts, 19,401 l. 17s. 4d. have been written off as irretrievably bad, but that there is still a balance of 5886½ l. 4d. left to meet out of the remainder as may in like manner eventually prove irretrievable; in addition to which the reserved fund has been increased out of the profits of the year to 3055 l. 16s. 11d.

There are now five directors to be elected—four in place of Thomas Dyer Edwards, Esq., Augustus Vigne, Esq., Frazer Bradshaw Henshaw, Esq., and James Haughton, Esq., who, agreeably to the Deed of Settlement, retire by rotation, but who are eligible for re-election, and offer themselves accordingly; and one to supply the vacancy occasioned by the resignation of the Right Hon. the Earl of Harrington.

The CHAIRMAN, in moving the adoption of the report, said that the directors had applied themselves with diligence to the not very easy task they had to perform. It would be seen that the nett profits for 1851 were 21,233 l. 6s. 9d., while those of 1850 were 25,560 l., but this year they gave the real nett profits, after providing for bad debts, which plan had never been adopted before; but it was thought best that the year's profits should meet the year's losses, even if the dividend should be reduced. (Hear, hear.) Last year they reduced the dividend in order to clear off bad debts, and yet a sum of 1000l. had been added to the reserve fund. The greatest economy had been enforced, and having observed those branches which did not pay their expenses, notwithstanding that the Provincial Bank of Ireland declined to join with them in doing so, they had closed them in those towns where they were not remunerative; and should continue to do so. Accommodation had been given to the public to the amount of 300,000l. more than in the previous year, not speculatively, but for the legitimate demands of business; and, notwithstanding several disastrous failures in Cork and other places, the bank had escaped loss. It is difficult to speak of the future, for although the business of the current year was going on successfully, still they found it difficult to find profitable investments for their surplus funds, although they had found some which were advantageous. He appealed to the shareholders to give their confidence to the directors, and to leave in their hands such questions as removing managers; and if they did not receive such confidence as a board, as they had a right to expect, it would be better to change the direction altogether.

Mr. DENNEY complained, that notwithstanding the increase of the business of the bank, the profits of the past year were less than those of 1851. He also believed that the amount of Government stock and Exchequer Bills was less in the past year. He then proceeded to some length to state that, although the average circulation of this bank was greater than that of the Provincial Bank of Ireland in every month of the past year, except two, its profits were only 21,000l., whilst those of the Provincial Bank were 47,658 l. 19s. 2d. He then proceeded to show that the Northern Bank, the Belfast Bank, the Ulster Bank, the Hibernian Bank, and the Royal Bank, all paid a larger per centage than this bank, and their shares were at large premiums in the market. He did not make these remarks in a hostile spirit, or from any want of confidence in the company, but only with the view of urging the necessity of more being done for its benefit. He wished to know whether the Government stock, Exchequer bills, and other stocks were estimated at the price at which they were bought, or if at the current price of the day. He expressed a wish that the report should be in the hands of the shareholders a week before the general meeting.

Mr. GARTLAND reminded Mr. Denney that the northern banks, of which he had spoken, had not suffered from the depression consequent on the failure of the potato crops, as this bank did, which was a national one. He also forgot, when he spoke of the diminution of profits this year, that 19,000 had been applied to write off bad debts. The shares of the bank were rising in the market, and it was progressing in public favour and prosperity. He could add his testimony to what had been stated in the report, that better times were dawning upon Ireland. He thought that the directors should have the confidence of the shareholders, and then that the executive power should be left in their hands.

Mr. M'MAHON, as a shareholder from the South of Ireland, could state that the business of the bank was prospering in that part of Ireland.

The CHAIRMAN stated, with regard to the remark of Mr. Denney, as to the reasons why, when there was a much larger amount of business in bills done by the bank, the profits did not increase, it was obvious that if 800,000l. was taken out of Government securities, and bills discounted with it at much the same rates of interest as was obtained in the Government securities, the profits must be much the same. The stock of the company was always estimated at what it cost the company. The board would consider the wishes of the shareholders with regard to issuing the report previously to the meetings in future. The report was then adopted.

The election of five directors was then proceeded with, and, after the termination of the usual routine business, the meeting concluded.

**WATER FROZEN BY BOILING.**—The following beautiful experiment may easily be performed by any one having an air-pump, and cannot fail being exceedingly interesting to those who take delight in the science of chemistry. Take a small thin glass jar, fill it half full of good ether, then place it within another jar half filled with water. Let this be then placed under the receiver of an air-pump; and as soon as the air is exhausted, the ether will boil and the water will freeze. The reason is that when the pressure of the atmosphere is removed by the air-pump from the surface of the ether, its own latent caloric occasions its expansion, and absorbing caloric from the water, it becomes converted into gas; and the water having now lost all its caloric of fluidity is converted into ice.

## PATENT LAW REFORM.—No. II.

[Continued from last week's Mining Journal.]

Had a board of examiners existed in 1765, and Watt been compelled to wait for their decision before he could take out a patent for his condenser, what would have been the result? It can be better imagined than described. Steam, in its varied and multifarious applications, would never, probably, have been made subservient to the thousand and one purposes of man; for we may reasonably suppose that, when called on to satisfy the examiners of the merits and novelty of his invention, other parties, whose prejudices and vested interests were menaced, would have opposed it, and urged that there was no novelty nor utility in the employment of a separate condensing cylinder to warrant the grant of letters patent—that steam had always been condensed before, either in the cylinder itself, as in Newcomen's engine, or in the atmosphere, as in Savory's engine, and that it would be injurious to, and imposing fetters on, trade to grant a monopoly for such a slight and frivolous variation of detail of construction. Can there be any doubt but that the examiners would have been inclined to refuse the grant? If, then, the invention had fallen in the public domain, would it ever have been adopted? We believe not; for it must be remembered that it took the fortune of a Bolton, and the scientific skill and northern perseverance of a Watt, unremittingly applied during the whole term of the patent (14 years), before the invention was brought sufficiently into use to prove remunerative. Seeing that if the board of examiners had existed in 1765, upon how frail and slender a chance the success of Watt's invention would have depended, we confidently ask, in the interest of the whole world, were it not better that the specifications of a thousand absurd, useless, and vexatious inventions cumbered the Chancery rolls, rather than risk the loss of so seemingly simple an invention as that of Watt?

Again: the clause whereby an Englishman is prohibited from introducing and patenting a foreign invention—which, if I remember rightly, was struck out of the bill of last session, and is introduced here again—appears to us most unwise and impolitic in a national point of view. Time was when a man was deemed to have deserved well of his country when he introduced and naturalised in his native land a useful and foreign invention; but now, with the cant of universal brotherhood ringing in our ears, which leads Englishmen to prefer everything foreign to anything native—to devote their time, money, and interest, to any charitable purpose that is not English, and to sympathise with South Sea Islanders, Hottentots, and niggers, rather than with our own hard-working, honest, and suffering brethren—few will be found to venture the advocacy of making the interests of England paramount. *Certes*, we yield to no one in the sincere desire to act fairly—nay, generously—towards any of our race, of whatsoever nation, colour, or opinion they may be. We would willingly share with them whatever advantages they may enjoy. They are free to trade with us, without let or hindrance; they may enter the markets of the world, even those which we have opened at great cost of life and treasure; they may take our inventions and improvements without impediment, and never make the English inventor any return; they may reside among us, and become one of us to all intents and purposes, without cost or annoyance. But we cannot see the wisdom, nor the justice, nor the reciprocity in forbidding Englishmen to import and acclimatise—if we may be allowed the expression in this sense—inventions which have been previously used in foreign lands. We should rejoice to see the rights and interest of foreign inventors as securely protected as those of Englishmen; but an inventor who, from apathy, or neglect, or ignorance, acquires no rights in England, by failing to obtain letters patent, can have no cause to clamour for protection to them. It is also in the interest of foreigners themselves that we object to the enactment of this clause. If it is ever passed into law, it is evident that an English manufacturer will be at perfect liberty to use the foreigner's invention, if he can, before the inventor obtains a patent here, and in that case without paying him one fraction in the shape of royalty, or license dues.

Again, the foreign inventor, who is seldom overburdened with capital, will find great difficulty in inducing Englishmen to purchase and patent his invention; for, independently of the great risk and uncertainty attending such speculation, in these days of rapid intercommunication, ten chances to one but that the invention, if an important one, will be known here as soon as in his native city; and some English manufacturer, with a dash, probably, of Yankee go-a-headism in his composition, will have improved the invention and brought it into working order, before the inventor has made up his mind whether or not he will take British patents. Where, then, would be his redress? How would his rights and interests be protected by the enactment of this foolish clause? Had this cant of universal brotherhood—everything for everybody, and nothing for oneself—not blinded the mental vision of the framers of the bill, they would have sought, it is but charitable to suppose, to reconcile the policy of favouring the introduction of foreign inventions into England with justice to the foreign inventors, by devising a clause to the effect that the right of taking a patent in England should be reserved to the foreign inventor for (say) twelve months after the date of the first patent granted by the State of which he is a native, or in which he is domiciled. If, however, he failed to obtain an English patent within the time allowed by law (say twelve months), then any other person, whether an Englishman or foreigner, should be at liberty to take out a patent for the invention.

The last clause to which we shall call the attention of our readers provides that, in order that nothing shall extend to abridge or affect the royal prerogative, the Crown (i.e. its ministers) may refuse to grant a patent for any invention it may deem fit; or in case of a specification being already filed, direct it to be cancelled. Against this provision we enter our most indignant protest.—1. Because it places the wearer of the crown—the object of respect and regard of all Englishmen—in a most invidious position.—2. Because under this almost sacred authority Government employees and ministers will be able to perpetrate, with impunity, acts of the greatest tyranny and injustice, from which there can be no appeal. The very vagueness of the terms is sufficient to indicate what may be expected. Who is to determine whether or not an invention abridges or affects the prerogative of the Crown? By what standard is it to be judged? Are Government boards to decide according to the convenience and requirements of the public service? If so, there is scarcely any branch of manufacture in which improvements can be made with the certainty of a patent being maintained for them. Will any future improvements in shipbuilding, steam-engines, and machinery, paddle-wheels and screw-propellers, distilling spirits, preserving substances, weaving cloth, &c., be allowed to be made, or to continue subjects of letters patent, when the Admiralty, the victualling department, or other Government board, will have to pay directly or indirectly the inventor for the use of his invention? The Royal prerogative, or the convenience of the public service, will be made pleas for giving scope to the meanness and litigious spirit of our bureau cratie, and for refusing the patents and defrauding the inventors.

If the results of the exercise of a man's intellect are adopted into the service of the public, by all means let the public pay for them, and pay liberally. To defraud him is a strange way to stimulate invention—a curious exhibition of public justice—pour encourager les autres. To satisfy such of our readers as have been so fortunate as never to have come into contact with Government authorities, that our estimate is not erroneous of the character of any aggregate of Government officials, who in their individual capacities may be proper set of men, we refer them to the case of the Baron de Bode, for an apt and striking proof of the rapacity, equivocation, and dishonesty of successive ministries and boards when acting in corporate capacities. Can any inventor hope to be more leniently and honestly dealt with than this gentleman? No; he will find that the Government may take his invention, use it, and refuse to pay; if hard pressed, they will procure the refusal of the patent under the clause referred to. And if the inventor is so ill-advised, so headstrong, as to contend with them, they, having no responsibility, the public purse, and the elite of the legal profession at command, will defeat him; and then, *we victis*, he is a ruined man—in purse, spirit, and in mind.

The story of the Patent Law Amendment Bill and the objectionable clauses, is a new version of the old fable of the frogs and their king. The public has clamoured for reform of the Patent Laws—certain busybody sections, with more vehemence than wisdom—and our legislative Jupiter threatens too easy a compliance to do away with "the obnoxious and barbarous Patent Laws." Should this ever come to pass, we fancy the public will entertain a shrewd opinion that it has not shown much more discretion and forethought than—

La gent marquée  
Gent fort sott et fort pourceau.

Our reformers appear to have lost sight of the important fact, but which we cannot impress too vividly on the minds of our readers, that the spirit and tendencies of the laws under which letters patent for inventions are granted are essentially good and wisely provident; the successive growth

of the calm wisdom and practical knowledge of ages; and that it is only in the reduction of fees and the alteration of mere forms of procedure—making one patent suffice for the empire, and consolidating the stages of application, with other such like modifications—that any amendment is required. Any alteration of the substantive Law of Patents would be detrimental to trade and destructive to intellectual property.

## MINING IN IRELAND.—No. V.

Having again visited the Cork district, and proceeded from thence into County Kerry, we will briefly report the result of our observations, reserving until our next visit, perhaps a fortnight hence, those mineral districts at Beervan, Knockmahon, and others, which are best known to our readers by the Swansea ticketing returns—our object being, in the present instance, rather that of directing attention to mineral ground in Ireland, where English capital may be employed with advantage; although, be it said, we have no interest in the slightest degree in one or other of the mines or property the interest of which we would advance—but do claim to ourselves a love and desire to promote the welfare of Ireland. Without further preface, having revisited the Coosheen Mine, for that was again our first point, we were glad to find that workings there about being resumed, the property, or rights, having been purchased by an influential party in London; and we may, therefore, hope that, with industrial application of capital, returns will be made, so as to induce capitalists to look to Ireland in this instance, as well as others, which it will be our object to treat upon, for investment and returns, instead of embarking in the schemes put forward for mining operations in Australia and California. Leaving Coosheen, which, we think, under prudent management, may, at an after, if not an early period, speak for itself, we go on to the Glenaulin Mine—a company for which has lately been formed; here we find splendid "expectations" as to "results," from a lode some 10 or 12 ft. big of carbonate of manganese, yielding on assay somewhat more than 30 per cent., with some 7 or 8 copper lodes, and a discovery within the past few days of another lode, yielding good stones of gossan, with ore slightly disseminated. Turning away from this, we proceeded to Kenmare; and here we are called upon to say a word as to "Mining in Ireland," so as to caution Irish "lords" and English "adventurers."

A few words, with a few facts, will, we think, be sufficient for our purpose. A property of some 2000 or 3000 acres are sold under an order of the Encumbered Estates' Court (for we begin to know something of these movements in Ireland), and a certain party, who shall be nameless (as indeed he ought to be, having a tender in his pocket of 50 per cent., or nearly so, beyond the actual purchase money) got, as we are informed, some 200 or 300 acres, and actually forgot to take the "bid," or offer, out of his pouch; and so accordingly got it for himself at the reduced price. Now, it would appear that certain acres were reserved for surface works, and such were assumed by the company to include the workings of the former company; but somehow or other, Irish like, it is discovered, when too late, that the Irish "fox" is more than a match for the English "goose," and the surface works are stopped to a certain extent—an injunction is obtained, the "English" attorney does not understand "Irish" law; the secretary and lawyer are sent over at a cost of some 60*l.* to 80*l.* which will be incurred besides the damage; while we do not hesitate to say the latter could not exceed 40*l.* or even say 5*l.* per annum; and thus it is that Irish mines are worked. Enough of this. We started from Kenmare to Killarney (the Lake Hotel), 21 miles, so says the driver, although we must needs say that, upon the system or principle of Irish arithmetic, figures are altered, inasmuch that the time was when 10*l.* English was equal to 1*l.* Irish; and that 14 English miles were considered as 11 miles Irish. Now, as Kenmare to the Lake Hotel is 21 miles, we consider they must take the lakes into notice; which we most certainly did, and highly were we pleased with them.

We might here say a word or two *en passant*. The Exhibition of National Manufactures and Products at Cork will come off on the 10th June, and as the railways will not only afford facilities, but reduced prices will be rendered to visitors from this to the "Sister Isle," we trust that Englishmen will avail themselves of those means which thus present themselves, not only of visiting the Exhibition, but seeing the advantages which Ireland presents for the investment of capital—more especially the development of its mineral resources. We must, however, resume, and again to business. It was only last week that we referred to the Castlemaine Mines, about 12 or 14 miles from Killarney, and the intent to open them with some *clat*; and, in fact, in demonstration of the feelings entertained by the managing director and body of proprietors—which, we trust, and feel well assured, will be returned in an ample manner, not alone by the united feelings of those who are recipients of their bounty, and to whom the means of subsistence is afforded—but in the shape of profits on the capital invested; this is a matter on which we can only express our hopes and wishes. We must, in treating on the mines of Ireland, however, confine our remarks to one mine on the present occasion.

CASTLEMAINE MINE, COUNTY KERRY.—The mineral tract possessed by the Royal Hibernian Mining Company, known as Menas, is situate in the parish of Kiltalla, in the county of Kerry, and is part of the property of Lady Hendley, from whom a grant for right of working has been acquired. It is within a few hundred yards of the village of Castlemaine, where ships of 150 tons burden load and discharge cargoes. The lode was discovered about 1787, when it was worked in a very simple manner, scarcely below the surface, and it is stated that 2000*l.* worth of ore was raised by the rude mode of working by spades and shovels. It was resumed about the year 1825, by the Hibernian Mining Company, under the direction of Mr. Weaver and Captain Treweek, and a water-wheel erected, a water course having been made for a distance of four miles, and a perpendicular engine-shaft sunk 22 fms. A whim-shaft was also sunk on the course of the lode about 17 fms., called Weaver's shaft. This latter was commenced in a part of the former old workings, and at the depth of 11 fms. a cross-cut is said to have been driven to the engine-shaft. In sinking the 16 fms. level, 70 to 80 tons of lead were raised, in tubs or banches, varying from 1 to 4 tons, having only one wall of the lode; and it is further stated, on the authority of one of the "old men" there employed, and from whom this descriptive statement was obtained, that a solid course of ore, "the whole length of the shaft," was arrived at. Here the "old men" sunk 8 ft. before stopping, when, owing, as it is said, to a flood, the water course, which passed over the limestone, broke into the fissures of the rock, and flowing through to the lode flooded the mine. Two men were working in Weaver's shaft at the time, and narrowly escaped. The engine-shaft also filled speedily, and several of the pumps still remain. Five cargoes, it is stated, were exported in the former working, from the opencast and sinking the 16 fms. or Weaver's shaft, without driving any levels.

The Castlemaine property has lately been leased to the Royal Hibernian Mining Company for 21 years, at the moderate dues or royalty of 1-20th, and operations have been commenced at surface. The rock formation in which the lode or lodes are found is limestone, running about north-east and south-west for a considerable distance, and, so far as surface indications present themselves, lead to an opinion that the lodes take the same course. Trenches or costeaning pits have been commenced to take the lode, and some old workings opened, from which stones of lead have been obtained, and an engine-shaft sunk from surface between 5 and 6 fathoms, which it is calculated will take the lode about 7 fathoms deep, judging by the direction of the lode as assumed from the old workings; stones of gossan are to be seen at surface, which, doubtless, be opened upon, so as to prove it in depth. Several large stones of spar, mixed with gossan, blende or black jack, and galena or lead ore, have been found, left by the former workings.

The mine is about 14 miles north from Killarney, and from Tralee about 7 miles. The carriage of ore, &c., to Castlemaine would not exceed 3*l.* per ton. The western boundary of the sett is the road running from Killarney to Tralee. On the north and east it is bounded by Sir William Godfrey's land and that of the Right Hon. Lord Montagu. Judging from the nature of the operations of the company, and those contemplated, and taking further into consideration the advantages the sett possesses from its locality and the nature of the ground, we think it well warranted a spirited outlay. The rates of labour are low. We should most strongly recommend that all work be set, so far as is practicable, by bargain, as securing the work being effectively done, and as tending to the economy of money and time.

Space will not admit us on the present occasion to say more; but, having some odd notes, and with the intent of re-visiting Ireland in a few days, we shall resume the subject matter, which we are well pleased to find excites interest on both sides the Channel.

NATIONAL EXHIBITION OF IRELAND.—We are well pleased to find additional subscriptions coming in, and that the prospective result of the Exhibition, which will open on the 10th of the next month, fully justify the sanguine expectations entertained by the projectors, who have applied themselves indefatigably to the attainment of the object in view—that of demonstrating the capabilities of Ireland, and throwing open her resources. Among the last contributions, we find the Bank of Ireland, 50*l.*; Henry Gibson, Esq., managing director of the Royal Hibernian Mining Company, 20*l.*; Sir Joseph Paxton, 5*l.*; John Hampson, Esq. (of Stockport), 5*l.*; and F. W. Kinder, Esq., Midland Great Western Railway, 5*l.*

COMMUNICATION BETWEEN ENGLAND AND IRELAND.—An influential meeting of noblemen and gentlemen interested in promoting a speedy communication between the two countries has been held, when Mr. O. W. Lang, jun., asserted the possibility of constructing a steamer capable of attaining a speed of 25 miles an hour: he proposes it should be 400 ft. long by about 40 broad, with a nominal steam power of 1600 horses; and represents such a vessel would make the voyage between Holyhead and Dublin in about two hours; while sea sickness would be altogether avoided, in consequence of the absence of motion of any kind except horizontal. Mr. Lang entered into numerous details, and offered, in reply to various questions, the most satisfactory explanations. The meeting terminated in the appointment of a committee to devise the best means of carrying out the proposed project.

## GRAND DUCHY OF BADEN CHARTERED NATIVE SILVER AND SILVER-LEAD MINES.

Mineral, May 18.—In company with Mr. Lindon and Inspector Daub, I have just finished going through the surface and underground work, for the purpose of practically advising you as to the working and extension of your mines in the Münstertal. I found the Teufelsgrub vein accessible by three adits, all of which are of large and commodious size, worked square at the bottom, readily admitting the applicator of rods with good sized waggons, carrying 2 tons. At present, waggons with four wheels, running on a plank, are used—an improvement on the wheelbarrow, but not equal to the transport of a large quantity of stuff at a cheap rate. In the uppermost level, I found the lode from 3 to 4 ft. broad—generally full of rich-looking gossan, with a great deal of crystallisation on carbonate of lime, as much as I have seen in some of the largest veins with the greatest deposits of metal I am acquainted with. In this level, some bargains are working on bunches of ore left. Some of these were 18 in. broad, nearly solid; but others, mixed ore, with carbonate of lime. In the lower level, 23 stopings are in work, but weakly mined. It appeared to me, from the abundance of gossan in these levels, although well mixed with ore, that the best portion of the lodes have not yet been reached, and that in the deep they will contain the silver-lead in more solid masses, as is the case in Cornwall. Such ground would there be worked by tributaries only; and the more regular plans of shafts and levels cutting the ore ground into regularly ventilated sections, would be reserved for greater depths than have been reached in these mines. The ground appears to have been faithfully represented in the calculations of the excavations of several thousand fathoms; but it can unquestionably be worked at much greater profit than hitherto, when the workings are put upon a proper scale. The end of the bottom, or Wilhelm level, which is 40 fms. below the Trutpert, or second adit level, is in a fine lode, yielding some cwt. per fathom; and this end is evidently approaching, if it be not in contact with, the long range of ore ground above, from which the principal returns have been extracted.

I had for the extent of the mining operations (naturally limited, considering the small means at the disposal of the former company) that the surface arrangements are very carefully and properly planned; but the entire machinery is in a bad state of repair, except the buildings, which are commodious in form, and of more substantial construction than those usually containing stamping, buddling, and dressing apparatus in England. These, when repaired, will be perfectly effective, and are worked by a very good supply of water, which does not fall in any season of the year. It is necessary at once to build a new stamps wheel, as the old one is quite unfit for further service.

The ore stuff is prepared at present by spalling and cobbling; the latter branch of the work is performed more adroitly by hand than usual; but notwithstanding that this is done expertly and cheaply as soon as the lodes are further opened, in consequence of the great additional quantities of ore that must be brought to the surface, other labour, to the depth of the deep adit, is necessary. I have, therefore, advised the erection of a powerful crushing-machine, the rollers to be 3 ft. diameter, the drawings for which are forwarded to Messrs. Potter, at Aix-la-Chapelle. This piece of machinery will be placed below the lowest levels of the Teufelsgrub and Schindler lodes, above the site of the principal stamping establishment, convenient to receive the rough or spalled ore from the mine, and to deliver the portion of it requiring stamping to the mills below. The crushing-machine will be driven by the same water that works the stamping mills, falling from the crushing mill wheel to those driving the stamps and the German buddling, and the German stamps, and the crushing floor will be fitted with jigging hatches and round buddles, upon the principle employed in the best English silver lead mines.

I calculate that this mill will be equal to the reduction of 100 tons of ore stuff per day, or from 4 to 5 tons of clean silver lead ore. The whole of this machinery will be erected with as much dispatch as possible, which will occupy three or four months' time. It will not be necessary to employ steam power for either crushing or pumping for a considerable time to come.

We all agree with reference to the underground work, that it will be necessary to carry on the bottom and the middle adits on the Teufelsgrub level to the junction with the Schindler, with as much speed as possible. For this purpose we have determined to sink a winze between the end of the bottom level and the Schindler lode from the middle adit, and at the depth of the lowest adit to drive both ways; thus, by directing the ground in the most convenient situation, the drainage and ventilation of the Schindler lode will be completed with the least possible loss of time.

We also propose to sink from the 3d or Trutpert level, at the junction of the Schindler and Teufelsgrub lodes; the quantity of water at this point does not appear to be so much as to prevent this being accomplished by means of pumps and manual labour, to the depth of the deep adit.

While this work is being done, I recommend the opening of the lowest adit to the Schindler lode. This is a cross level to the southward, made by the ancients, there being 80 fathoms to open from the part already cleared to the vein. The air is very bad in this level, and a shaft must be sunk from surface to a depth of 24 fms. to ventilate it. This large lode has been found at intervals filled with rich silver lead ore for a width of 5 feet; and, when put into a systematic state of mining, will, from its appearance, yield very large quantities of ore, at least equal to the estimates. The Teufelsgrub lode is smaller than the Schindler, being generally from 18 inches to 3 ft. wide, and the ore ground usually occupies from 6 in. to 18 in. of the centre vein, and its yield is very constant for a distance of upwards of 300 fathoms.

I have here only noticed the two lodes that are in a state for immediate operations. The Herrenwald and other cross veins belonging to the sett must be worked in their due order of succession. On the whole, my inspection has fully satisfied me regarding the great value of this mining property, which is so compact as to allow of concentrated operation on a scale that is rarely met with. The convenient position of so many lodes crossing each other, so as to be got at by extensions from the surface, is most important in an economic point of view.

In conclusion, I may state that by stopping the present backs on the Teufelsgrub, under the present imperfect mode of working, about 12,000 florins worth of lead and silver may be made marketable during the time that the new machinery is erecting—say, before the end of August. I am, however, anxious that you should proceed under the most modern, inexpensive, and efficient system of mining; and I would strongly urge upon the committee that they should underturn by means of the deeper adit, and lay good railroad throughout the long courses of ore in these rich silver lodes; that they should have the new crushing apparatus erected, and complete; that the stamps wheel should be rebuilt; and that the smelting furnaces, with all the machinery in the stamping houses, should be put into thorough repair. Although some outlay and time are necessary for this purpose, it appears to me that capital cannot be so well expended in any other way; and that it is more judicious to submit to these costs now, and have done with them, as the result will tend to the full development of these mines, and to the great and permanent profit of the company. With reference to the working of the St. Anton and Heinrich silver and cobalt lodes, we are of opinion, that by sinking about 10 fms. from the tip of the principal veins, which are now separated, they will unite at their junction, and a body of cobalt and silver of great value will be discovered.—MATTHEW FRANCIS.

## IMPERIAL BRAZILIAN MINING ASSOCIATION.

The half-yearly meeting of shareholders in this company was held at the London Tavern, on Thursday, the 27th May.

JOSHUA WALKER, Esq., in the chair.

The CHAIRMAN commenced by observing his regret that there was not a larger assemblage present; and that it was only during the last half hour that he had been made acquainted with the necessity that he should preside. It was in his recollection that, at the last half-yearly meeting, it was agreed that Mr. Wheeler should become a member of the board, and his election ought to have been a matter in the notice of to-day for confirmation; but, unfortunately, it had been omitted. Wishing to retire from the office, he had so long held in favour of Mr. Wheeler, that gentleman had acted as the chairman since November, and should have presided this day, but for the omission referred to. He would, therefore, at once request Mr. Thomas to read the notice convening the meeting, the minutes of the last meeting, and the directors' report and financial statement, which was done; and the minutes of the 27th Nov. were unanimously confirmed. Mr. Wheeler was re-elected as a director, and Mr. Valpy as auditor. Mr. Blackland, the other auditor, being deceased, it would be necessary to elect another person in his stead at a future meeting, to be called for the purpose. He (the chairman) then said that it was a matter of very great regret to have such a statement and report to submit. However, they had received a sort of proposal from persons already holding a considerable interest, stating their willingness to take to the extent of 4500 of the company's shares, at 30*s.* each, from any parties willing to accept of such terms; and the conditions were that they should be allowed to become directors of the company—all which the board were quite willing to join in the matter, and to accede to. A list for receiving names would lie at the office until the 10th of June for that purpose.

The report further stated that the produce of gold during the last six months had still further diminished by nearly 19 lbs. as compared with the previous half-year, and because the Maria workings have failed to fulfil expectations. The 24 heads of stamps went to work on the 16th Feb., and up to the 31st March only 3 lbs. of gold had resulted therefrom. At Bananal, all operations had been suspended; only 15 lbs. 5 ozs. 5 dwts. 12 grs. had been obtained in the half-year ending 31st December. At Congo Socco the produce had been 61 lbs. 1 oz. 1 dwt., or 16 lbs. more than the preceding months, and has, on its own cost, with a proportional amount of the London and Rio expenses added, left a balance of nearly 500*l.* in favour of the half-year. These sales of gold realised 2923*l.* 10*s.* 10*d.*, whilst the whole expenditure has been 6567*l.* 17*s.* 5*d.*, leaving a deficiency in the half-year of 3643*l.* 7*s.* 4*d.* Captain Brokenshaw had stated that he could bring the half-yearly outlay to within 500*l.*—about 3000*l.* to Bananal, and 2000*l.* to Congo; 75 lbs. of gold would be required to cover the former, and 50 lbs. to pay the latter; and it will be observed that the present returns from Congo are at the rate of nearly 60 lbs. for the half-year. The directors have waived the receipt of salary from the 31st of Dec. last, and the Rio agency (Messrs. Mackay, Miller, and Co.), have handsomely consented to accept a moiety of their remuneration from the same date. The force on the 31st December consisted of 39 Europeans, 69 native labourers, and 395 negroes, in all 504 persons, or 52 less than on 30th June, 1851—the establishment retaining its usual good health and order. It has been necessary to sell 2500*l.* out of the reserved fund, which reduces it to 13,000*l.*, 3*s.* per cent. stock. Below this sum, the trustees feel it would be most unwise and unsafe to reduce it, and fresh capital must at once be procured. The directors have, therefore, deemed it expedient to make a call of 10*s.* per share, payable on or before the 1st of August next. The present intention of the directors is to abandon Bananal altogether, and to remove the establishment to Congo Socco, where the future operations will probably be exclusively carried on. The expenses cut down to the lowest practicable limit, a good ground of hope may be entertained of a fair remuneration, when a force adequate for all purposes shall again be brought to bear upon Congo Socco, and the stamping power be removed.

Mr. GOLDSMID inquired whether the board had not also received proposals from another party who were ready to purchase the whole concern, and whether it was not possible that terms might be come to with them for the sale of Bananal, and apply the money received from thence to working Congo Socco? There was no secret in it; he had heard that the St. John del Rey Company was so disposed. The CHAIRMAN said they had proposed to take none of the property. The report was to a very great degree incorrect, and the board were not in a situation to accept the terms talked of. He could assure the meeting it had assumed no other shape than a matter of conversation. It was indiscreet at the present moment to say more on the subject.

Mr. GIBSON expressed a wish that the meeting would be content, and abide by the decision of the board, which was as far as they were able to comply with the offer to make as to the 4500 shares. He hoped parties present would come to themselves as to the question. It was not compulsory; those who wished to retain their shares could do so, and those who, like himself, wished to retire, had now a favourable opportunity of so doing.

Mr. G<sup>d</sup>ADALLA saw no reason why they should do so; and if a sale of the pro-

party were advisable it should be done by public auction, to obtain its utmost value by competition. He for one considered the company could be brought to the 34 ft. level and made pay; consequently, he would not relinquish any of his shares. And as to the new party, why were the shareholders to be kept in ignorance of who they were until the 10th June? They might be willing to do little, and on the other hand, perhaps, too much. Too vigorous in their operations, they might choose to make a call of 2d. per share at once; therefore, if the board chose to abandon the helm, the better way was to go to public sale at once; but as he did not look on the gloomy side, he should prefer paying a 10s. call to work Gongo Soco, and nothing else.

Mr. Wynn said, for the last six months, almost day by day, he had taken vast pains in fairly looking into their affairs generally, reducing the expenditure, &c., in plain language, or something beneficial, would turn up; nothing had. The Maria workings did not answer, and the parties upon the mine did not come up to the mark as to qualification. A sale by public auction was totally impossible. The negotiation alluded to with St. John del Rey was mere talk; and, holding a very large interest, by which he should sustain, at least, a loss of 3000l., he had made up his mind to transfer over all his shares to the party hinted at, at 90s. each.

Mr. Goldsmith proposed an adjournment, to give time for receiving offers from any party willing to negotiate for the purchase of the concern. Mr. BNAVE protested against an adjournment, as a mere waste of time. A sale could not be legally made under any circumstance, however advantageous, because it was absolutely necessary that every shareholder should be a consenting party (and they were a body of 600 persons); one dissentient could upset it.

Mr. M'LAURIN seconded Mr. Goldsmith's proposition, observing that the St. John del Rey Company were anxious to relieve the company, by taking the slaves and idlers out of their hands, which would be a great relief. Common humanity dictated that it should be done, and the deed gave ample powers.

The Chairman observed, that the estates and property could only be legally transferred by the board, upon the dissolution of the company, not otherwise. He would propose that the report and statement of accounts be received, adopted, and copies sent to the shareholders, which was carried unanimously.

A PROPOSITOR then handed in a motion, to the effect that the company be forthwith dissolved; but not being seconded, it fell to the ground.

Mr. BARCLAY said he had long been an advocate for winding up the affairs of the company, but looking at the reserved fund and property, he thought it likely that more than 10l. per share might be obtained for it.

Mr. GRANT thought it likely, and as such ought to be at once accepted by all those not willing to pay further calls.

Mr. WHEELER was of the same opinion. It was equitable and fair on all sides. It forced no one out; those who kept in must pay 10s. call, and sure to have another to follow. On the other hand, they have only to sign their transfer and take up their money, as he intended doing.

The Chairman put Mr. Goldsmith's amendment, which, on a show of hands, was lost. He then put the motion emanating from the board, which was carried, with only three hands against it.

The usual vote of thanks was given to the chairman, and the meeting separated.

## Original Correspondence.

### EXTRACTING GOLD FROM QUARTZ.

**RESPECTED FRIEND,**—Two letters appeared in last week's Journal on the subject of my patented processes for separating gold from auriferous minerals by smelting, being the production of Septimus Piesse and a "Practical Man." I recommend both these gentlemen to wait until they are better acquainted with the subject, before they again appear in print. At present they must be of necessity ignorant of the merits, whatever they may be, of my processes, and I decline, from prudential reasons, entering further on the subject. Allow me, however, to inquire of Septimus Piesse if he really the experienced smelter he has represented himself to be? I have reason to believe otherwise.

With regard to the question whether a ton of mineral can be smelted at a cost of 10s. per ton, I may add that a copper smelter re-smelts his slags when they contain 5 per cent. of copper. Thus 100 tons of slag contain 10 cwt. of copper, of the nett value of 40l.; therefore, this sum covers the cost of labour, fuel, and wear and tear of furnaces, &c., leaving a profit on the transaction. The cost cannot exceed 5s. per ton of slag. Under the most favourable circumstances, a ton of auriferous mineral can be smelted at nearly a similar cost, to which I have added sufficient to cover special and incidental charges, such as grinding, &c.

My further reply must be in the language of two gentlemen, eminently qualified by their acquirements in the science of chemistry, and their extensive knowledge of practical operations, to form a judgment on the novelty, utility, and practicability of my processes. I, therefore, enclose the reports of T. H. Henry, Esq., F.R.S., and Robert Oxland, Esq., which be good enough to insert in your next Journal. **WILLIAM LONGMAID.**

**Beaumont-square, 5 mo. 27.**  
 "I have witnessed the process of Mr. Longmaid's for the extraction of gold from quartz by smelting, and consider it sound in theory and complete in practice. The quartz operated on in my presence was poor, containing, according to my assay, 1 oz. 14 dwts. 15 grs. in the ton; the slag containing only 2 dwts. 12 grs. in the ton, although the process was rather hastily conducted. To the best of my knowledge, the process is new, and as the materials used are those most commonly met with on the face of the globe, I should think there are few gold countries in which it might not be employed with advantage. **May 20.**"

"I have assayed the slag No. 2, and find it does contain a trace of gold, but too small for estimation, although done with every care. **T. H. HENRY, F.R.S.**  
**18, Lincoln's Inn-fields, May 22.**"

The annexed report is from Mr. Oxland, a practical chemist of established repute:—

"This is to certify, that I have seen in operation Mr. Longmaid's patent process for separating gold from quartz and quartzose matters by fusion and other peculiar treatment, which I am not now at liberty to describe, but which depends on the ingenious application of certain remarkable properties of gold not hitherto known. The process is novel in character, appears to be very effective, and is well adapted to the purpose for which it is intended, being remarkably simple, and comparatively inexpensive. **May 22.**  
**ROBERT OXLAND.**"

### RAILWAY FROM HAYLE TO HELSTON.

**SIR,**—Looking over your Journal of the 15th instant, I observe a paragraph informing your readers that it is in contemplation to construct a railway from Hayle to Helston, and that Mr. R. Symons, surveyor, of Truro, is engaged in preparing the plan and section. I am glad to find that the requirements of that locality have attracted any attention, and shall be still more happy to find that a railway is to be really laid down. I am very intimately acquainted with the physical features of the country through which it is proposed to put the line, and can assure you that it would be difficult to find another place where a railway would be so useful, or where it could be constructed at so small a cost. It is truly stated in the paragraph alluded to that for about six miles there would be no cutting. The first cutting would be at Wheal Vor, and if the line is to go by *Sithney Water*, there would be only one more cutting worth mentioning, which would be through the hilly ground between *Sithney Water* and *Sithney Trough* (vulgarly so called). The soil is a soft clay-slate, which would cost but little in removal. The land would cost but little, as for six miles I know it is nearly all a mine waste.

There are several mines situated near the line, which would contribute very materially to the goods traffic, and a considerable passenger traffic would accrue from the thickly-populated neighbourhood; and the population would be supplied with coals, timber, lime, sand, &c., by means of the rail. I remember that Wheal Vor adventurers intended to lay down a railway for their own use only, about 25 years ago, and it would then have repaid them. I wish the promoters success, which I am confident would follow to the adventurers who invest their capital in the undertaking.

**St. Erth, May 26.** **A MINE AGENT.**

### MINING ECONOMY.

**SIR,**—On the 6th January last, my friend, Mr. George Abbott, promised "to point out the way by which the practical mine captain might and ought long since, and even yet can, open and work our mines with a saving of not merely 30, but probably 50 per cent. of the present opening and working expenditure, when mining will make greater profit from copper at 70l. per ton than now with the present standard."

Having, about a fortnight after this, offered some comments on the above, which were inserted in the Journal of the 24th January, I have now to express my conviction that the explanation given by Mr. G. Abbott on Saturday last, are more conjectural than practical, and not easily carried out as he imagines. I should have been better pleased with his letter, had he confined himself to a full description of the tools to be employed, the size of the machinery, and the possibility of using them in the various sinkings and intricate drivings underground, rather than treating the same in the superficial manner he has done, classing it as one "among the dozens of economies yet practicable in mine operations."

The quickest mode of "sinking shafts and opening levels, ventilations, cross-cuttings, and other dead workings," is of that importance, that the slightest new idea, or suggestion, deserves due attention, and is entitled to the fullest consideration on all sides, involving, as all those operations do, a vast amount of expense, and occupying a very considerable time to make perfect. Any one that can add his mite to the fund of general knowledge possessed by those who have the labourious portion to do, as well as those who have the direction of such works, deserves the thanks of all.

Such parties are well aware of the difficulties that have to be met with and overcome. The mere sinking of 6 ft., or 1 ft., in a shaft has in some instances cost from 120l. to 1500l.—the labourer getting but bare wages for the three or four months it would occupy; and when such hard ground continues for the whole sink of 10 fms., the time and expense may easily be conjectured. Such being the nature of the ground in sinking, it naturally follows the cross-cuts, for at least some little distance, have also to be driven through hard ground, probably 30l. to 50l. per fathom.

In such situations, the project of Mr. Abbott would prove invaluable, if he

could point out the certainty of its being practically carried out. As he omits doing so, and as he has been underground often enough to have met and seen some of the difficulties that miners "are heir to," why not explain how he proposes to apply "water, steam, gas, or compressed air to cheap cutting, sawing, scooping, boring, and breaking the levels and shafts of the mines," and what his "powerfully compact machinery" consists of? He knows how contracted the space of underground levels are, requiring machinery that is compact, if such a mode can be adopted. Then, what is his plan? Boring has been tried; scooping and sawing in easier to be fancied than applied. I shall, therefore, be glad to learn what say such of your practicals as Capt. Puckey, Kitto, John Richards, Nicholas and Joseph Vivian to it. They have had long experience, and I doubt not would gladly hail any feasible plan whereby underground labour could be performed with greater ease and economy in time and money. When Mr. Abbott has sufficiently enlightened them, I shall be ready to listen, *seriatim*, to the remainder of this "dozen economies yet practicable." Let us at present dispose of the first, and try to secure 80 per cent. benefit—"preserving the rock by cutting it into useful sizes for building, paving, &c." Can he name any mine in which he is directly or indirectly concerned that has succeeded in any attempt of the sort? Until he is more explicit, and favours us with "further suggestions in your next Journal," I shall pause, anxious to see what notice the mining community take of the matter, and their opinion thereon. **May 27.**  
**ANGUS (of Truro).**

**P.S.**—At last Thursday's ticketing, the average produce was 84; standard, 109l. 14s.; price per ton of ore, 6l. 6s. According to Mr. Abbott's notion, the like produce at 75l. standard would be only 8l. 8s. 9d., showing a difference of 2l. 17s. 8d. per ton. Including Devon Great Consols, there are only four making dividends out of sixteen mines which sold ore at that sale, and I may safely say none would, at so serious a reduction.

### MINING DIVIDENDS AND CALLS.

**SIR,**—Next Thursday will make twelve months since I addressed to you my first letter on this subject, wherein I briefly stated my opinion that, out of 41 mines that had made calls during the preceding month for no less an amount than 34,802l. 2s., only the nine first and four others were deserving of them. In this short period of time what is the result? Even out of the nine, La Min has been suspended, together with seven others, or one-fifth of the whole, and only two out of the lot of 41 have arrived at a dividend-paying state; whilst all the remainder have gone on bi-monthly or quarterly making further calls, and have further calls to make, which I assert without fear of contradiction. Thus the 41 are reduced to 31 still making calls, and although vast sums have been expended in several during the last twelve months, how insignificant has been the amount of ore sold by the whole batch, in comparison to the sums extracted by them from the purses of the shareholders? and how slight remains the prospect of their doing better at an early period? even in the face of the glowing reports from the agents and paid inspectors, that so amply tend to crowd your columns weekly, causing the truly legitimate and practical to smile and bestow pity upon those who scribble such unmineralic twaddle.

We have now arrived at a time when produce in every description of metal bears a highly remunerative price, it, therefore, behoves all who can bring the ore to market to do so, for the interest of the mine and benefit of the shareholders. Month after month your columns teem with paragraphs about the value of stones of ore from this, that, and the other mine, assayed and analysed by competent authorities, buoying up the expectations of the credulous. Such paragraphs, repeated from the same mine so frequently, and no sales of ore resulting, tend only to deteriorate mining in progress and value. Shareholders would do well to pay little attention to such fulsome tales, and, in reply, tell their agents to "bring some of the produce to market." Six out of the 31 mines have hitherto not sold an ounce; and nearly as many more only within the last quarter. I may, therefore, congratulate "Fair Play," as I did in mine of the 16th June, in "not being interested in either of them." Referring him, and such of your readers as please to refer back, to my said letter of advice and caution, and confirming all I then wrote—I am, &c., **ANGUS (of Truro).**

## Mining Correspondence.

### BRITISH MINES.

**ALFRED CONSOLS.**—The ground in the 100 ft. level continues fair for driving; here just the same as when reported last week. The lode in No. 1 winze, sinking under the 90 ft. level, east of Field's engine-shaft, is worth quite 80l. per fm.; the water here is draining fast by the 100 ft. level. The stopes over the 90 ft. level, east of this shaft, are just as reported for the last month—viz., 50l. per fm. Wyld's shaft is progressing favourably under the 90 ft. level. The lode in this 80 ft. level, west of the engine-shaft, is from 4 to 6 ft. wide, all capel. The lode in the 60 ft. level, west of this shaft, is about 4 ft. wide, the most part spar, containing a small quantity of mundle. There is no change to notice in either of the cross-cuts driving north and south of Wyld's shaft. We are now preparing to put a line of rods from Field's engine to the south lode.

**APPLEDORE.**—We have finished the plat, and have commenced the cross-cut east, which we have driven about 8 ft. The ground is moderate for driving—no timber required. We have not done anything on the lode since last week.

**BAT HOLES.**—In consequence of not taking down any of the lode in the 60 and 48 ft. levels, it and all other points are just the same as last reported—getting a moderate quantity of ore, whereby we calculate to more than pay cost for May month. We received instructions from Mr. Jones, on the 21st inst., to commence a new shaft at the lower Bat Holes, which we have attended to. We commenced the shaft yesterday morning (Tuesday)—now down 1 fm. 3 ft. and we are happy to inform you that this shaft is in excellent ground for sinking, so that we expect our progress will be rapid by way of getting down the shaft and opening this mine, which is now quite in an infant state—being not more than about 25 ft. deep below the adit level. The commencing this shaft has caused a great excitement amongst the men who worked in this mine; and all of them say, only the water be taken out, and they are prepared to show good branches of ore in various places. At any rate, this can be proved with a comparatively small outlay.

**BEDFORD UNITED.**—The lode in the 115 fathom level east is at present yielding 6l. tons of ore per fm. In the 103 east the lode is worth 5 tons per fm. The other parts of the mine are without alteration.

**BLACK CRAIG.**—No. 1 cross-cut having been driven now 11 fms. from the north wall, and the end continuing hard and poor, we have stopped it, although we have seen no regular south wall yet; but it is very likely that we are a long way past it. The end driving east from this crossing does not look so well; but the men who have begun to drive west on the same run of bearing rock have some fine solid branches of ore with them. No. 2 end has greatly improved in the last 2 ft. driving, and have gone through some fine branches of ore; and the ground looks very kindly at present. Nos. 3 and 4 cross-cuts continue in a hard jointy rock. The rider, or bearing rock, is still producing good work for lead in the stopes; but the horse of ground is increasing in size on each side in proportion. Notwithstanding, I believe this horse of poor rock to be variable in size; and I am not without hope that it will become smaller or be broken up by having branches of ore scattered through it, so as to pay for stopping away, because I see that, in some parts of the mine, this has been the case; and in the cross-cut in some places, this kind of rock has fine branches of ore running through it. I am sorry to say we are making very slow progress about Welsh shaft and other things.

**May 25.**—The men driving west from No. 1 cross-cut have ore ground with them; we have stopped the end driving south. There are some fine branches of lead in No. 2 cross-cut—a great improvement. Nos. 3 and 4 cross-cuts are still in the horse of ground, and producing little but lead. The stopes in the bottom of the 28 ft. level are still producing good lead.

**BLAEN CAYLEN (LEAD, CARDIGANSHIRE).**—We have put six men to clear and sink engine-shaft, and four to drive the deep adit. The lode looks well; in spilling through the old workings, there is good lead standing, and there can be no doubt but, with a small outlay of capital, this mine will be very productive.

**BYRN-ARIAN.**—There is nothing done in the 30 fathom level for the past week, in consequence of the water becoming quicker. We hope to get the water down shortly, as the lift of pumps will be dropping down this week. The lode in the 20 fathom level is still large, with small branches of ore. The ground in the winze sinking under the 20 is become more settled, as they have passed through the alide. We have removed the men from the back of the 30 west to the back of the 10, east of this shaft, where the Pennam and Bryn-Arian lodes formed a junction; here the lode is large, and at present producing good work for dressing. The lode at Hallett's engine-shaft, sinking under the 30 ft. level, is 5 ft. wide, composed of killas, black jack, and lead ore. The lode in the 30 ft. level north is 3 ft. wide, with a promising appearance, and at present yielding a little ore. The deep adit level, driving south on Joseph's lode, is rather improved since last reported, yielding from 8 to 10 cwt. of ore per fm.

**BODMIN WHEAL MARY CONSOLS.**—I have just now (May 27) come up from the 40 ft. level. Since we resumed driving north, we have extended 10 ft. in a fine stratum of light killas, and while doing this we have been stripping down the branches near the cross-course, where No. 3 ought to be, from its position in the 10 and 20, and the lode is now clearly defined, the walls being 3 ft. apart, the lode composed of peach and jack, spotted with yellow copper ore. I have also been this day through the old works in the west, and the water is all drained as deep as they are cleared (viz., the 10 ft. level), and I have no doubt it is drained nearly to the bottom of the old mine. In the event of our commencing operations in that direction, it will be advisable to put up a whim, to enable us as soon as possible to avail of the ground now drained, and to raise the lodes outwardly in line to form a junction about the old mine, where they raised large quantities of ore; and as we have plenty of power in our engine, I am confirmed in my opinion already given that we shall have a good mine in the valley west. I trust we shall throw more light on the lode No. 3 by Saturday, when I hope to write you again.

**BORINGDON PARK.**—We have communicated our adit level with the 28 ft. level in East Boringdon, and have commenced driving on the caunter lode. We have driven about 2 fms., and have a good ore lode, from 3 to 4 ft. wide; this lode appears at present to be making off from the old one, and there is not the least doubt on my mind but that it is a distinct one, which a few fms. more driving will prove. The 15 ft. level, going west, has not yet interested the slide; the lode is leady throughout, and we are saving the greatest part of it. Marehion's shaft is down about 31 fathoms below the 15 fathom level. The lode in the shaft is not underlying as much as in the 15 fathom level.

**CARADON WOOD.**—Our engine-shaft is now down 27 fms. below the adit; the lode is still in the shaft, and it appears to be very large, composed of spar, mundle, and flookan, with spots of lead, but very scarce; we intend to sink 2 fms. deeper before we cut the plat. The shaft is very wet, but not so troublesome for timbering as it was; we have no doubt that this is a continuation of the Blacon lode.

**May 25.**—We have not yet cut the western wall of the lode in the shaft; the lode has much the same appearance as when I wrote last week—it is composed of spar, mundle, and flookan. The bottom of the shaft is 37 fms. below adit. We set to the men on Saturday last to sink 2 fms. in the shaft, also to cut bearer holes, put in bearer

bars, and put the lift in the eastern, which, I hope, will be completed in about five weeks from this time.

**CEFN GWYN.**—The lode in the engine-shaft, sinking under the 10 fathom level, is 7 ft. wide, producing 1 ton of ore per fm. The lode in the 10 ft. level, driving east, is 4 ft. wide, producing about 4 cwt. of ore per fm.

**CHARLESTOWN UNITED.**—The lode in the end west of new shaft is about 3 ft. wide, producing a little tin, and bearing a very kindly appearance. In the stopes east of No. 1 cross-cut, the lode is about 8 ft. wide, producing some excellent work. The ground in the cross-cut, north of Fatwork shaft, is much improved for driving, so we shall be able to go forward with our usual speed. The lode in the end east of this cross-cut is about 2 ft. wide, and still continues to produce spots of copper ore, mundle, and a little tin; the ground by the side of this lode is of a beautiful character. The lode at Blue Borrow shaft continues the same in size and quality, being about 8 ft. wide, and worth about 3 cwt. of tin per 100 sacks. We have also put a pair of men to take down the lode west of our new incline shaft, which we find to be about 8 ft. wide, and producing work of fair quality.

**CREETOWN.**—The No. 1 lode, No. 2 level, still continues about 1 ft. wide with good ore in places, and a fine gossan in one part of it; the lode in sinking the shaft under this level is turning out some fine ore. In the No. 3 level the lode has improved in the end considerably. There is a fine gossan in the back of the end; and I hope to see good ore here shortly. The stopes continue to look well in both ends, yielding the ore as reported last week. In the No. 4 lode, the rock has become more compact in both the ends than it was; and as No. 2 and 3 are approaching No. 3 lode, I hope we shall find it with a greater certainty on this account.

**CUBERT.**—The appearances in both the bottom ends are much as last stated—some excellent work has been broken from each during the past week. The lode in the 35 ft. level east being somewhat disordered and split into branches, we have put the men to cross-cut north, with a view of finding the north portion of it more productive. The lode in the west, driving in this level, is still productive, and maintains its usual kindly appearance. The lode in the 25 ft. level east is much the same in appearance as stated in last week's communication—still very large, and principally consisting of quartz, with casual stones of lead. The lode in the 15 ft. level east has not yet been attained on the north side of the cross-course; the ground, however, is very favourable for driving, and quite congenial for lead, and there is great probability that the lode, when met with, will be found productive. The lode in this level to the west is still improving, and some excellent work has been broken from it during the past week. The plat in the 45 ft. level being now nearly completed, preparations are making for sinking.

**DEVON AND COURTENAY.**—In the 70 ft. level west the end is just as last reported; the stopes in the back of the 70 are worth at least 10l. per fm. The stopes in the 60 ft. level west will turn out about 24 tons per fm.; the cross-cut in the 60 is equally as good as last reported. The lode at Rundle's is a little improved.

**EAST ALFRED CONSOLS.**—We have good stones of fine yellow copper ore in Doble's end, driving west on the north lode; the lode is about 3 ft. wide, and very promising—I think it is likely to turn out some quantity of ore. There is also a new lode opened on about 3 fms. to the north of the lead lode, which has a very promising appearance; we have sunk 4 fms. from surface on this lode. The ground in the adit end north continues fair for driving. In the other parts of the mine we have nothing new.

**EAST BLACK CRAIG.**—The men have now driven about 10 fathoms east. The carbonate of lime has increased in size, but otherwise there is no alteration.

**EAST BORINGDON.**—Annie's shaft is down about 10 fathoms below the 28 ft. level; ground much the same as in my last report. We have holed the 28 ft. level, going west, to the adit level. At Boringdon Park Mine, I have set the 28 fathom level east to a pair of men to drive at 27 ft. fathom. The tributaries in the back of the 20 ft. level east are breaking some good work.

**EAST WHEAL GEORGE.**—The lode in the 32 ft. level, west of shaft, is from 3 to 4 ft. wide, composed principally of spar and mundle, with occasional stones of grey and yellow ore. The tributaries in the back of the 12 ft. level are running good wages. We have about 20 fms. more to drive to complete the lobby home to the wheel pit; the men are getting on as fast as possible, but I doubt our being able to complete the excavation before the lobby is brought home to unwater it. I have taken out at Plymouth the principal part of the timber required for the wheel. They are getting on pretty well with the castings at the foundry; the axle is already made. I beg to call your attention to the driving of the cross-cut south of the 28 ft. level, to notice the south lode. I think it desirable to commence with it as soon as possible, in order to get it as near the lode as possible by the time the new engine is ready to work, which would save time. I hope to receive instructions to let it on Friday, the 28th inst., it being our monthly setting. I should recommend it to be driven by four men.

**EAST WHEAL REETH.**—The engine-shaft is down 6 ft. below the 84 ft. level, ground favourable for sinking. We have to notice to you that the shaft contains two distinct lodes, and by their bearing and underlie will continue in the shaft for a considerable depth. The ore, bearing nearly east and west, will no doubt prove a valuable discovery at deeper levels. The north and south lode in the shaft is also improved, and the character at this point looks very promising. The 24 fathom level end, north of engine-shaft, on the north and south lode, maintains its productiveness, but public much better for driving. I have decided, on Saturday next, to set a winze, by public survey, to be sunk to communicate between the 10 and 24 ft. levels, and from the same cross-cut to raise sufficient tin to pay expenses. I intend driving the 24 and 6 or 9 ft. further, and commence a winze also in the bottom of this level, to communicate with the 34; from this point also we may fairly calculate upon good returns of tin. The mine is developing the most cheering prospects, and we shall not fail to make this a valuable mine.

**EAST WHEAL RUSSELL.**—We have sunk Hitchen's shaft since we resumed it 3 fms. 3 ft. The lode in the bottom is much harder, with a firm capel wall on the south side of the shaft. We have also driven the cross-cut north 3 fms. 1 ft. in a light blue killas, and 1 fm. 3 ft. east towards the cross-course and tunnel end in a most splendid gossan, the tunnel end is just the same as on my last report, very kindly, not without good stones of ore, and plenty of mundle.

**ESGAIR LLEE.**—According to the dialling, the 10 fathom level, east of the cross-cut, must now be near the cross-course, on the course of which will be our nearest point to intersect the caunter lode, which, in the deep adit east, is much the same as when I last wrote, being saving work for about 3 ft. wide, and looking kindly. The lode in the level above, for the last 10 or 12 feet, has not been so productive, but in the present end it is looking better, the grey part being about 8 or 10 ft. wide. We have had medium looking well, yielding 1 ton of ore per fm.

**GARREG.**—In the 20 fathom level north the lode is 6 ft. wide, occasionally producing fine stones of lead. The lode in the 20 ft. level south is 8 ft. wide, with but little lead. Three pitches are now working in the back of this level, from which we are getting a small quantity of lead.

**GEORGIA CONSOLS.**—The prospects here are at this time very cheering. We have good lode in the bottom of the west flat rod shaft, which is the deepest, and represent the best part of these mines. There is also a good lode to the north of Ommanney's shaft, on Mial's lode; and at Winterbottom's shaft, in South Georgia, the lode is improving; this improves very much the appearance, and I think will also increase the value of these mines. The water from this shaft is drawn by 150 fms. of flat-roads attached to the steam stamps, which work beautifully. All other parts, both tubwork and tribute, are much the same as when last reported. We have sent to the smelting-house to-day (May 27) 5 tons 10 cwt. 1 qr. 22 lbs. of tin.

**GREAT WHEAL BADDERN.**—We have completed cutting plat at Kenworthy's, in the 51 ft. level, and are now about to sink for eastern, plat, &c. The lode in the 40 ft. level, east from Burgan's, is 11 ft. wide, producing good work for driving. The rise above this level is yielding very good work. The rise above the 30 fathom level east, in driving some good work, but not rich; the ground in the 30 fathom level east, the new lode, is improved for driving, but unproductive at present. The 30 east, on the new lode, has the most promising appearance, composed of pryan, mundle, and occasional spots of lead. The lode in the adit, 10 ft. level, west from Burgan's, will produce 4 tons of ore per fathom, of good quality; this level is being driven west in an entire new piece of ground, and should it open as well as it promises, it will prove to be one of the best discoveries yet made in this mine. We have communicated the rise above the 30, west from Sunderland's, to the 20 ft. level, which has opened tribute ground. The rise above the west is turning out some good work. The tin ground at Kenworthy's is turning out fair work for the stamps. The stopes and pitches are turning out favourably. We expect to sample to-morrow (May 26) 70 tons, and show an improvement in the quality of the work we have had to dress.

**HALAMANNING AND CROFT GOTHAL.**—The plunger lift is in complete working order in Park engine-shaft—one pump was dropped in it, and another in the flat rod shaft during the past week. The lode in the 4' end, west of Orchard shaft, is not altered in value since last report. Birch's shaft, on Bailey lode, contains a very good lode; its bottom is about 6 fms. below the 20 ft. level; water has prevented us continuing to sink; however, this will soon abate, and we shall immediately resume. The lode in the 4', west of Buzzo's, continues to produce a large quantity of good ore, and the 30, which is being driven upon, we expect to equal in richness. The rise above the 30, east of the diagonal shaft, is 10 in. wide, producing 2 tons of rich ore per fm. The lode in the 40 end, east of the eastern level, is much more productive, especially towards the bottom of the level. A winze is being sunk from the 27 to the 40. We have great pleasure in stating that the pitches are still improving. We are very busy about the sampling—we expect it will exceed 400 tons; at present we can give but a rough guess. The cylinder and bob are fixed in the crusher-house, and the steam whin will be at work in about three weeks' time, and the crusher in about five. The present prospects of these mines are brighter than they have ever been, and the universal opinion is that it will make an extraordinary profitable concern.

**HOLMBUSH.**—The lode in the 145, east from the diagonal shaft, will produce 2 tons of ore per fm., and is driven 4 fathoms 4 feet from the shaft; the lode in the western end will produce about 2 tons of ore per fm., and is extended 2 fms. 3 ft. from the shaft; we have been occasionally hindered in this part of the mine by the water; otherwise greater progress would have been made. The lode in the 132 ft. level, east of the diagonal shaft, is 10 in. wide, producing 2 tons of rich ore per fm.; this level is extended about 344 fms. from the shaft, and about 50 fms. east of the great cross-course. In the tribute pitches behind this end an improvement has taken place since last setting day; one thing is remarkable—the nearer we approach the granite the richer we find the ore, having at times stones and spots of rich grey ore: when proved in the granite, we believe the ore will be found of far superior quality than at present. We have made a communication over the 132 south, on the lead lode, with the pitch below the 130; we are now well ventilated, and shall proceed with all possible dispatch to extend the 132 southward. The lode in the 120 ft. level, east of the great cross-course, is 15 in. wide, producing 2 tons of ore per fm.; but we think the main part of the lode is farther south, and, consequently, we have set the men to drive in that direction to prove it. The lode in the 110 ft. level east is 6 ft. wide, and will produce 10 tons of ore per fm.; we have driven about 30 fms. through a large and productive lode. The lode in the 100 east is 4 ft. wide, producing 24 tons per fm.; no lode taken down in the rise over this level. The lode in the 100, west of Wall's engine-shaft, will produce 1 ton of ore per fm. The ground in the cross-cuts at the 124, from Wall's engine-shaft, is favourable.

**KESWICK.**—At Brandley, the 20 ft. level north is worth 18 cwt. of lead ore per fm.; the salt sump stopes is worth 10 cwt.; Kelley's rise 10 cwt.; Burr's stopes 12 cwt.; the 30 ft. level north 12 cwt.; No. 1 stopes 2 cwt.; the 30 ft. level south 12 cwt.; the salt sump-shaft 20 cwt.; Graham's stopes 20 cwt.; Coulson's stopes 20 cwt.; and the tribute pitches 12 cwt. of ore per fm. At Thornthwaite, the stopes in the 27 ft. level is worth 12 cwt. of lead ore per fm.

**KIRKCUDBRIGHTSHIRE.**—The lode in the 86 end, west of Stewart's, has improved a little this week; it is now producing good stones of ore. The sumpmen having fixed a new plunger-lift at Gilpin's, the water is up in the bottom levels. The 63 end west has a kindly lode, yielding 4 ton of ore per fm.

**LYDFORD CONSOLS.**—The lode in the 70 fathom level south is large and kindly, being composed of flookan and quartz, with occasional good spots of lead ore. The lode in the 60 fathom level north is large, full 3 feet wide, and being composed

steeple, quarries, and good stones of lead ore is very promising. I have suspended the stope in the back of the 60 fm. level, and put the men to rise for ventilation, and which will be noticed in future as the mine rises, the lead ore is turning out good stones of lead ore. The south rise in the back of this level (60), called Westworth's rise, is progressing satisfactorily, turning out some good work for lead. The cross-cut in the 50 fm. level is still in hard ground. In the 50 fm level north we are sinking a winze for proper ventilation of this driving, as also the one below (60). We continue to clear the levels with all speed.

**MARKE VALLEY.**—In driving the western cross-cut north, in the 80 fm. level, the stratum is killas, and much easier. In the eastern cross-cut the lead ore is chiefly capel, with small branches of copper ore running through it; it is in very hard ground. The lead ore in the eastern end is composed of capel and spar, intermixed with munda and copper ore. The stope in the bottom of the 65 fm. level is yielding 9 tons of copper ore per fm. The lead ore in the winze sinking in the Midway level is yielding 8 tons per fm. The stope in the bottom of this level 10 tons per fm. The winze sinking in the 60 fm. level is saving work. Preparations are being made to resume sinking Fawcett's shaft.

**MERILYN.**—There is no alteration in the lead ore in the engine-shaft since my last. The lead ore in the 46 fm. level east is still producing about 1 ton of lead per fm.; the lead ore in the 36 fm. level west is rather small, but still producing good stones of lead. The lead ore in the 26 fm. level west is small and unproductive. The stope is looking quite as well as when last reported.

**MOLLAND.**—The engine-shaft is now about 31 fms. below the 42; the lead ore is 3 ft. wide, in a small state than it was last week; it is also producing a few stones of ore, and can be sunk for 15 ft. per fm. The 42 west is considerably improved; it is now worth 5 ft. per fm., and can be driven for 3 ft. per fm.; the 42 east is 2 ft. wide, producing good stones of ore; the lead ore in this level has been much more regular than it has been in the level above it, and I do not think it much more regular and productive at a greater depth than the present level. The 30 west at present is small and unproductive; the 30 east is a strong capel lode, 3 ft. wide, producing occasionally good stones of ore; the lead ore in the winze sinking under this level is about 18 ft. wide, not so well as when last reported. The ground in the 42 cross-cut is still very favourable for exploring. I think we now have about 25 tons of ore dressed, and shall have a few tons more shortly.

**NORTH BASSET.**—On Saturday several pitches were set on tribute, varying from 1s. 3d. to 5s. 11d. We have now 53 tributers at work in the various levels. We sampled 171 tons on Wednesday last. In the new shaft the lead ore is 4 ft. wide, and is the most splendid cross-cut ore yet discovered in the mine.

**NORTH BULLER.**—Louisa engine-shaft is sunk to the 59 fm. level; our next operations will be to divide and ease down the shaft for drawing from this level, after which we shall cross-cut north and south to intersect Clinton and Louisa lodes. We have commenced sinking a winze by four men under the 40 fm. level on Clinton's lode, which will be required for air when the lode is cut in the 53. We have not yet cut either lode in the 40 cross-cut south, but have intersected another branch; the ground is harder than when last reported.

**NORTH DOWNS.**—In the 90, east of west shaft, Christie lode is 3 ft. wide, with a small branch of ore on the north side of it. In the 80, east of ditto, it is 18 in. wide, with good stones of ore, and improving. In the 70, east of John Michael's shaft, the lode is about 18 in. wide, with a good mixture of ore through it towards the bottom of the end, and looking promising. In the 60, east of ditto, the lode is 1 ft. wide, worth between 5 ft. and 6 ft. per fm.

**NORTH WHEEL BULLER (REDRUTH).**—Since our last bi-monthly report, we have sunk the engine-shaft under the 70 fm. level 1 ft. 4 in., opened a plat, and extended the 80 fm. level east and west about 4 fms. on the north part of the lode; in sinking, it must be recollected, the ground proved hard, which prevented our opening a greater length; the present ends are just getting into more favourable ground, and the lode, though it is not so rich as it was, is still producing a fair quantity of ore, and will, no doubt, be productive as it approaches the ore ground gone down in the level above. The 70 fm. level has been extended west about 5 fms., and 1 fm. has been risen against the winze, which has been sunk under the 60 about 3 fms. 3 ft.; this winze and level have produced several tons of ore—the lode in the present end is small, but containing good yellow ore, and promises to improve in size as it may be extended. The 60 west is resumed driving, but no ground measured for this report; the end is about being under a winze sunk from the 50 to within 2 fathoms of this level; in the winze we had a large ore lode for about 6 fms. below the level, and we hope soon to make a considerable find of air, which we have opened some valuable ore in the last fathom below the first 9 fms. below a clean killas country, and the last 4 fms. into a sparry cross-course of a very promising nature, letting out quantities of water and draining the levels above, from which we are encouraged to hope to find a valuable lode on the other side. In reference to this cross-course, from a minute survey of its bearing and resemblance, compared with results in the adjoining mines and parallel lodes, it leaves no doubt on our minds of having a valuable piece of ground before us. The 40 fm. level is west of this cross-course, and has been extended about 5 fms. 4 ft., and a rise made above the level 1 ft. in, which we have opened some valuable ore in the last fathom below the lode has been divided, and not so good, but is again improving, and producing a leader of yellow ore; this level has been extended east on the south part 4 fms. through very good ore ground, leaving a good back and bottom to work on tribute; the present end contains a lode 3 ft. wide, composed of ore in spar of a very kindly appearance. The 30 has been driven 7 fathoms 3 feet on the nearest point to be over the level below, and the ground reduced in price from 5 ft. to 3 ft. per fm.; this end is about 10 fms. behind the 40, and we expect every day to intersect the same lode, which will then enable us to ventilate and raise ore from the back of the level below, and the lode on the next level to have a parcel of good ore for the market. The 20 fm. level has been extended on Francis's lode west about 8 feet, and suspended for the present; the end contains a lode divided into branches, but not of an unkindly appearance. We have only two pairs of tributers at work, who are getting wages, and we hope shortly to increase the number.

**NORTH WHEEL ROBERT.**—The branch of ore we had in cutting through the lode in the 30 fm. level, at Murchison's shaft, is dipping west; the lode in the end, driving east, is 4 ft. wide, composed of soft sugary spar, flooken, spots of copper, and munda, with a beautiful soft killas—a very kindly lode. By the latter part of the present week we shall be in a position to let the end drive west in this level, when I expect to raise a good pile of ore, as we have got a good branch of ore to commence driving on, and which appears to be dipping west. The lode in the adit end is just the same as last reported. The engine-shaft is sinking below the 30 fathom level by nine men with all speed. The engine is in very good order, and the mine is dry, very ready, and owing to the dry weather, we have not water enough to work our drawing machine, and are obliged for the present to work the horse-wheel.

**ORSEDD.**—In sinking the shaft we are passing through a hard bar of ground. The lode is small, and producing but little lead. We hope soon to have a change of ground, when we may expect an improvement in the lode.

**PERRAN WHEEL JANE CONSOLS.**—We are progressing as usual with the sinking of the shaft and driving the adit; the lode in both places is of great promise, and this mine, before long, will become a very valuable general property. No mine in the country are there finer branches, or stratum more congenial for tin and copper.

**PORKELLIS UNITED.**—In the eastern end, in the 24 fathom level, on the north lode, the lode is 3 ft. wide; in the western end, 2 ft. 9 in. wide. We have commenced stopping the back of the lode, east of cross-cut, in the 6 ft. wide, and for a distance of 3 fms. the lode is 3 ft. wide in the back of the rise, the average quality of the lode is from 7s. to 8s. per bushel. We shall have to burn all the tin from this lode, which will enable us to clean all the munda out of it. We commenced burning yesterday, and have more tin than we can get ovens to burn it in the neighbourhood. We have commenced building ovens on the mine, which will be in active operation next month. In the winze the lode is still as we last reported. We have now cut through north Tymorle lode; it is 2 ft. wide. We have just commenced driving east. We still find 1 ft. of the lode worth 2s. per bushel, and the remainder contains good spots of tin. We have not yet cut the Horseshoe lode, in the 12 fm. level, on the north Tymorle lode; it is 2 ft. wide, good stamping work. Our other operations in the 12 fm. level are proceeding as usual. We shall, at the end of a month, have a good parcel of tin to sell; it will be from 14 to 18 tons.

**PRINCE ALBERT CONSOLS.**—The prospects of this mine are exceedingly cheering. Six men, in the back east of the shaft, are stopping, at 30s. per fm. The lode is producing well, and will not, from present prospects, cost 2s. 6d. in 17. In the east end, on the new lode, our prospects are good; in fact, this is a fine champagne lode, and has greatly enhanced the value of the mine. The cross-cuts are still in course of driving, and in a few days we expect to cut the eastern part of Prince Albert lode and the western part of the new lode. The lode in the western end is looking well, and as we near the western cross-cut the lode greatly improves. We are progressing favourably with the surface work. The engine house will on Monday next be finished, and therefore next week we shall begin to fix the engine, and by the end of June we shall get it to work. We have been at work 12 months, and in no mine in the county has more work been done with the same number of hands employed. We have stamped out (for smelting house) about 5 tons of tin, and stuff unstamped at surface containing about 14 tons; total, 19 tons of tin at surface. We are now raising, with a very few hands, about 6 tons per month, and could much exceed that quantity if our new stamps were now at work, for we are only at present driving two ends on the course of the lode and stopping one back, whereas the western back, 13 fms. long and 10 fms. high, are held in reserve.

**SILVER VALLEY AND WHEEL BROTHERS.**—In the level east, from the winze near Murray shaft, we have broken five bags of good silver ore since Monday, and a quantity of dressing work, which will pay for going through that process. Rising in the back of the deep adit, between Highbarrow and Oak shafts, the lode is 18 in. wide, composed of flooken and white iron, intermixed with grey silver ore. In the 24 fathom level, east from Oak shaft, we are cross-cutting south to intersect a branch from the main part of the lode, which we believe will prove productive; this will be accomplished by the beginning of next week.

**SOUTH OF SCOTLAND.**—The south shaft is now down 3 fms. below the 12 fm. level. The west lode in the shaft is very kindly, and appears to improve in going down. Therefore, I would advise the shareholders to have a water-wheel on the mine as soon as possible, as the water is much increased in the shaft; it would enable us to open up the mine at less cost, having now a sufficient supply of water to work any machinery that may be required.

**SOUTH PLAIN WOOD.**—The winze sinking on Nicholson's lode, in the adit level, is now about 6 fms. 2 ft. deep, where the lode is about 8 ft. wide, composed of munda, peach, spar, and ore, yielding about 8 cwt. of ore per fm. The 10 fathom level east, on Nicholson's lode, is driven about 20 fms. 3 ft.; the lode here is from 9 to 10 ft. wide, composed of much more munda, spar, and ore, producing about 4 tons of ore per fm.; here the lode is more promising, giving every encouragement of having large quantities of ore at our disposal, and we are now driving south from Gabriel's shaft, to intersect Campbell's and the caunter lodes, is driven about 12 fms. 4 ft.; the ground continues much the same as when last reported on. We have now a large pile of ore stuff on the surface, and also a large quantity to stop away from the bottom of the adit down to the 10 fm. level, which would pay well for dressing, provided we had a stamps and crusher, for working which a water-wheel about 14 or 15 feet high and 3 feet breast, must be erected. I consider that such a wheel might be had for about 250, but we might meet with a second-hand one for much less—the stamps and crusher would cost about 250. Under present circumstances, we cannot get out anything like all the copper contained in the stuff, unless at a considerable expenditure in labour. I should, therefore, strongly recommend that a water-wheel, with stamps and crusher, should be got on with as soon as possible.

**SOUTH TRELAUGH.**—The engine shaft is sinking below the 60 by eight men—ground hard; in the cross-cut, west on the side, in the 60, we intersected a lode which has a kindly appearance. There is no improvement in driving north on the lode in the 60.

**TRELAUGH.**—At Trellawny shaft, the cross-cut in the 120 fm. level is driven 6 fms. towards the lode, and if the ground should not become troublesome, we hope to meet with the lode in little more than a week. In the 107 fm. level, north and the lode is 2 ft. wide, and worth 10s. per fm.; but the ground is hard; south end, 3 ft. wide, and

worth 5s. per fm.; but from the appearance of the lode in the bottom of the 93 fm. level we expect shortly to meet with an improvement here. In the 93 fm. level, north end, the lode is without change; south end, the lode is 2 ft. wide, and worth 10s. per fm.; east, lode 2 ft. wide, and worth 13s. per fm. In the north mine, at Smith's shaft, we have cleared up 2 fms. under the 168 fm. level, and have 1 fm. more to get to bottom, which will require a day or two more, when the sinking will be forced on with all speed. In the 68 fm. level, north end, the lode is 2 ft. wide, and worth 8s. per fm.; south end, 1 ft. wide, and worth 9s. per fm. The 55 and north is still poor. The stope and pitches are looking much as usual, excepting that the ground is a little harder.

**TRELEIGH CONSOLS.**—Christie lode: In the 100, west of Garden's shaft, we have resumed driving on the course of the lode, which is divided into branches, and poor. In the stope above the 90, west of Woolcock's rise, the lode is worth 10s. per fm. In the 100, east of Christie's shaft, the lode is 1 ft. wide, with spots of ore. In the stope below the 90, west of Christie's shaft, the lode is worth 3s. to 40s. per fm. Middle lode: In the 61, west of cross-cut, the lode is about 18 in. wide, with stones of ore; ditto, east of cross-cut, lode 9 ft. wide, principally munda, with stones of ore.—Parent lode: In the 64, east of cross-course, the lode is small and poor. In the 30, east of Parent engine-shaft, the lode is 18 in. wide, containing no ore.

**UNITY CONSOLS.**—At Gray's engine-shaft, in the 70 fm. level east, the lode in the end is about 18 in. wide, and producing good work for tin; the lode in the 70 fm. level west is 2 feet wide, and also producing good work for tin. In the stope in the bottom of the 60 fm. level, east and west, the lode is 2 ft. wide, and worth 10s. per fm. for tin; in the stope, in back of the 60 fm. level east, the lode is 2 feet wide, worth 12s. per fm. for tin. In the rise in back of the 50 fm. level east the lode is 1 foot wide, producing saving work for tin. In the 40 fm. level, east of Unity eastern winch shaft, the lode is 2 ft. wide, and worth 5s. per fm. for tin; in the 40 fm. level west the lode is 18 inches wide, producing good tin work. In the 30 fm. level, east of Unity eastern winch shaft, the lode is 2 feet wide, producing saving work for tin; in the 30 fm. level, west of Gray's, the lode is 2 feet wide, producing saving work for tin. At Lambro, in the 40 fathom level cross-cut, going south from Kenworthy's engine-shaft, the ground must still be considered good for driving, and I hope we shall cut Hampton's lode in a week or two from this date (May 24), and I am sanguine that we shall have a good lode there, as the tributers, some few months since, when working in the bottom of the 20 fathom level, which is over the cross-cut, sampled about 40 tons of copper ore, worth 3s. per ton, the west of Arthurs, the engine shaft is now down to the 60 fm. level. I shall put some men to drive the cross-cut north, the ground is good for driving; now east 4 fms. stent, or cut the lode, at 4 ft. per fm. In the 50 fm. level, going east, the lode in the end is much the same as last reported; in the same level, going west, the lode is 18 inches wide, producing good stones of copper ore. The tribute pitches on Unity side are looking much better for tin than they have for some time past. The copper pitches at Lambro are going on steadily, and in appearance much the same as stated last week. We shall have our copper ore sampling to-morrow for 35 tons, from Lambro, and no doubt, worth 6s. per ton. By the end of this week I hope to go to smelting-house with 5 tons of black tin for sale.

**WEST GOGINAN.**—The lode in the engine-shaft, sinking under the 30 fm. level, is 6 ft. wide, and there appears to be more ore in it than we have seen before for some time. The lode in the 30 fm. level, east of this shaft, is much the same in appearance as the lode in the 30 fm. level, west of this shaft. The ground in the cross-cut south is still favourable. The lode in the new shaft, sinking from surface, is 7 ft. wide, with a very promising appearance for a lode at that depth.

**WESTON.**—The extent of driving in Cross's level for the month is 2 fms. 2 ft. The breast at present looks very good, and I had with strong head of water being washing buddies, which, in my opinion, gives convincing proofs that we are close to the lode, and very strong indications that there is ore in it. Price this month, 11s. 11s. per fm.

**WEST POLGOOTH.**—We have been draining the bottom level of the old men's workings, where we find the lodes large, and of a promising character indeed. We must sink the sump 10 fms., then drive west in Hewas's ground on the lodes, where, no doubt, important discoveries will be made, and in a few months every one connected will be satisfied in having an established mining property.

**WEST WHEEL ALFRED.**—We have got the water down to the 30, in the western shaft; and to-day (May 27th) put four men to drive west on the south part of the lode, as well as four men to strip down the lode, which is 18 ft. wide. By Saturday next, I hope to report on the value of these places. The new engine-shaft is being sunk very rapidly in a very congenial looking killas for copper ore.

**WHEEL ARTHUR.**—The lode in the 20 fm. level west is 18 inches wide, composed of spar, gossan, and spots of ore. The lode at the rise, in the back of the 35 fathom level, is producing 1 ton of ore per fm. worth 6s. per ton; the lode in the 35 fm. level west is 4 ft. wide, producing 2 tons of ore per fm., worth 7s. per ton, and, from present appearance, likely to continue equally good; the lode in the winze, under the 35 fathom level is 3 feet wide, composed of spots of ore and spar. The lode in the stope under the 20 fm. level, east is 2 ft. wide, producing about 3 tons of ore per fm., worth 5s. per ton. The lode in the 30 fm. level west is 18 in. wide, composed of spar, munda, and spots of ore. We have about 10 fms. to drive this level west, to get under the ore ground that is already discovered in the bottom of the 35 fm. level, where I expect we shall raise a good deal of ore between these two levels. The ground in the 50 fm. level cross-cut south is looking more favourable, and I consider the lode to be near; there is now a little water issuing. We shall have about 70 tons of copper ore (of Nos. 1 and 2) ready for sampling on Friday next (May 28).

**WHEEL CATHERINE.**—Owing to a large influx of water, we have not made that progress in driving east we anticipated. The men have been employed to sink on the lode in the bottom of the adit level, where we find it 2 ft. 3 ft. wide, containing good stones of lead of superior quality. We are preparing to erect the wheel, to enable us to go deeper.

**WHEEL CREBOR.**—The lode in the stope below the adit, west of cross-course, continues to go down a good course of ore; in driving through the cross-course to open the south lode, which is not seen west of Rundle's shaft, we have fine stones of rich copper ore; I hope to see the lode point in a fortnight, and I anticipate seeing a very good course of ore. We are making good progress in clearing and securing the adit east towards Gill's; when communicated it will be an important point gained, as it will take off any surplus water, and cause a fine ventilation. In the 12 we have intersected the north lode referred to in my last; we have two good ore lodes to the west of the cross-course (within 3 fms.), and, by their present direction, they will form a junction about 20 fms. west of the present end; this, in some measure, accounts for the course of ore in the stope below adit, making west before the adit; this, with the cross-course before us, can leave no doubt of our having a large piece of rich ground. The 2 and 34 fm. levels are both improving; we may expect very shortly, a good change in these ends. At Gill's, in the cross-cut we are intersecting branches of ore, dropping into the south lodes; it is evident by our cross-cut that the lodes the tributers had the fine course of ore on about 20 years since have not been intersected below that point; a short time now will prove this. The other parts of the mine are the same as last reported.

**WHEEL EDWARD.**—We have sunk the shaft 3 feet on the course of the lode, which is about 6 ft. wide, composed of spar, capel, priam, and spots of yellow and black copper ore; the underlay is about 3 ft. in a fm. north. We are now down 20 fms. 3 ft. The water is increasing, and we now draw about 90 gallons every hour.

**WHEEL HAMLYN.**—The lode in the shaft appears to look better; it is getting softer and more spar in it; the deeper we go down the better I like it. I would, therefore, propose to sink a little deeper, and should it still improve, I think it advisable to drive a cross-cut from Phillips's lode and cut Fuller's, and in doing so we shall have to drive about 25 fms. and be about 18 fms. deeper than the bottom of the shaft. The shaft is now about 12 fms. from the surface, and by sinking on the course of the lode, I calculate we shall have to sink 30 fms. before we get to the deep adit, where we may expect to see (from the appearance of the lode now in the bottom of the shaft) a very agreeable change; and by driving this cross-cut about 12 fms. towards Fuller's lode we shall cross a manganese lode (the one we first met with in the shaft), and which, I have no question, will turn into a copper lode in depth.

**WHEEL HARRIETT.**—The engine-shaft is sunk below the 40 fm. level 6 fms. 3 ft. 6 in.; we have not yet discovered the north lode, but, from calculation, it should have been into the shaft ere this—set to nine men, 2 fms., at 25s. per fm. The 40, east of engine-shaft, is driven 1 fm. 5 ft.; the last 5 ft. east of the second cross-course, and it is our opinion that the principal part of the lode is north, and we have set to drive in that direction, by 4 men, 2 fms., at 4s. 10s. The stope in the back of the 40 will drive 20 fms. per fm.—set to four men, at 3s. 10s. per fm. In the pump winze, below the 40, the lode has not continued so much copper ore during the last 6 feet in sinking, but the "clotte" is wearing out, and I think we shall have a better lode ere long; it will yield at present 44 tons per fm.; it is below the level 6 fms. 8 in., and is set to six men, 2 fms., at 18s. per fm. The 30 east, on north lode, driving towards Bates's shaft, is much improved—lode 18 in. wide, and will yield 24 tons of better than an average quality copper ore; set to four men, 2 fms., or hole, at 8s. per fm. You will please bear in mind that the late company drove the 30, west of Bates's, towards us, and for want of the plan we are not certain when we shall communicate; but we were told by the former agent, that the lode in the 30, east, was driven 6 fms. 4 ft. 1 in. more to drive. We have driven, which, if they are correct, would be 5 fms. 2 ft. 1 in. more to drive. We have driven on the 30 cross-cut north towards the new north lode 13 fms. 3 ft. 11 in.; in the present end a branch is cut, producing some good copper ore, and next week hope to know more of its value; driving by six men, at 5s. per fm. We shall be prepared to sample 30 tons of copper ore by the 1st June. The ground is hard in this mine, consequently, although the places in working might have been expected to yield more copper ore in the time, we think that the mine is opening very well, and likely to make a permanent property.

**WHEEL LANGFORD AND BARING UNITED.**—During the past week we have sunk the engine-shaft 6 ft. and are now 5 fms. 4 ft. under the 10 fathom level; ground still very favourable. We have driven the 10 fm. level, east of Malachi's shaft, 8 feet more; the copper lode is still equally good. We have broken down 5 cwt. more of silver ore, of tolerable quality. We shall this day (May 27) take 2 parcels of silver ore to the smelting works, particulars of which I will furnish you with in my next. Our best quality ore is worth 390s. per ton; the second quality is worth 34s. The engineers are now engaged in erecting the engine for the stamps and crushers, and altogether we are progressing in the most satisfactory manner.

**WHEEL LEMON.**—The prospects in the 30 fm. level west, on the engine lode, are much improved since the meeting of adventurers: it is about 15 inches wide, worth 7s. per fm. 4s. to 6s. per barrow—a good strong looking lode. Under this circumstance, we would recommend the sinking of the engine-shaft with all possible speed. It is pleasing also to say that the north lode is opening better for tin than was expected at the present depth; it is about 20 fms. from surface, or 15 fms. under adit level.

May 25.—I am glad to inform you we have cut the lode east of the adit at Canneggy; it is rather more than 1 ft. wide, having a promising appearance—spar, yellow and black ore. I will see it to-morrow, and give you all particulars.

**WHEEL MAY.**—The lode in the bottom of the engine-shaft is 10 in. wide, producing some very good stones of ore similar to what you saw when on the mine last. The lode in the 10 fm. level, going west, is 18 in. wide, composed of white iron, spar, and spots of ore. I have put two men to drive east in the 10 fm. level, in order to cut the cross-course we have already discovered in the 20 fm. level, where I hope we shall discover some ore.

**WHEEL ROBINS.**—Our adit level is now cleared and repaired to the end; and the men are now engaged in opening a communication between the adit and the 20 fm. level—the air in the latter level, east of the shaft, having become so foul that we have been obliged to suspend operations there for the last week; but we expect to hole this level with the adit this week, which will effectually ventilate this part of the mine, when we shall resume driving here, as the lode is of a good size and of promising appearance, and is producing tolerable tin ore. The 20 west, on Watson's lode, is still ore very promising, and will, doubtless, yield much ore in depth. We are driving a cross-cut in the 30 to intersect this lode, and we are not progressing fast as I had anticipated, as our progress is impeded by a desperate hard bar of ground, such as never before has been in Wheel Robins. The stamps are almost ready to go to work; and as soon as we have holed the winze between the 20 fm. level and the adit, I think we shall be able to supply the stamps comfortably, and the men who have hitherto been

employed in re-opening the mine will be put to break dust, to assist in paying the cost of the mine; and if Watson's lode proves as good to the 30 as we have a right to expect from its appearance in the 30, we shall quickly return both copper and tin.

**WHEEL SURPRISE.**—Having met with a capel in the new engine-shaft, which we are now through, but not sufficiently broken off to describe the precise nature of the substance; under the shaft already seen is a dark coloured stratum, mixed with spar and fine munda. I presume it is the lode we discovered in the west end of the wheel pit, as before noticed in my former report; if so, it enhances the property much, as the shaft now sinking (which is 10 fms. deep) will command the north and south lodes. I find the adit will be 10 fms. 5 ft. under surface, which is being pressed on as fast as possible. The axle with other castings are on the mine, and we have now commenced cutting the lead.

**WHEEL TREMAR.**—The ground in the engine-shaft is favourable for sinking, and the lode has continued good all the way while passing through it, producing fine yellow ore and fluor-spar. The shaft will be down to the 34 fm. level in about one month from this time, when we shall cross-cut north and south to intersect two lodes; and from the appearance ore, we have reason to expect pleasing and profitable results.

**WHEEL TREMAYNE.**—The boundary engine-shaftmen are still engaged cutting plat. In the 93 fm. level we have opened 2 fms. on the course of engine lode, which is 10 in. wide, producing some good saving work for tin. In the 83 fathom level, east of boundary shaft, on Allen's branch, the branch is worth 18s. per fathom; west of the same branch, the branch is worth 7s. per fm. In the 73 fm. level, east of Allen's shaft, on Allen's branch, the branch is worth 10s. per fm.; the cross-cut south of shaft, towards Wallis's lode, is driven 35 fms., and is progressing favourably; in the same level, west of shaft, on a north branch, the branch is worth 12s. per fm. In the 63 fathom level, east of Allen's shaft, on Allen's branch, the branch is worth 14s. per fm.; in the winze sinking under the same level, east of shaft, on Allen's branch, the branch is worth 12s. per fm.; in the same level, east of shaft, on the engine lode, we have intersected a small cross-course, which has disordered the lode, and is unproductive; in the winze sinking under the same level, east of shaft, on the engine lode, the lode is worth 2s. per fm. At champion shaft, on the south lode, in the 20 fm. level west, the lode is 18 in. wide, unproductive; in the rise in the back of the same level the lode is 18 in. wide, worth 4s. per fm. At Laurie's shaft, on Wallis's lode, in the 50 fm. level west, on the north lode, the lode is 7 in. wide, unproductive. At Painter's flat-rod shaft, on the south lode, in the 66 fm. level west, the lode is 18 inches wide, opening tribute ground. At west winch-shaft, on the same lode, in the 57 fm. level west, the lode is 15 in. wide, worth 10s. per fm.; in the same level east the lode is 1 foot wide, worth 5s. per fm. In the winze sinking under the 57 fm. level, west of shaft, the lode is 10 in. wide, worth 6s. per fm. At Madron's shaft, on the same lode, in the 70 fathom level east, the lode is 24 ft. wide, opening tribute ground. The new engine-shaft, on the same lode, cutting down under the 60 fathom level, will be completed to the 70 fathom level this week. At Arthur's shaft, on the same lode, in the 20 fm. level, south-east on the caunter lode, the lode is 14 in. wide, unproductive; in the winze sinking under the same level, east of shaft, the lode is 2 feet wide, opening tribute ground. At Taylor's shaft, on the same lode, sinking under the 18 fm. level, the lode is 1 foot wide, opening tribute ground; in the winze sinking under the same level, west of Mitchell's shaft, on the same lode, the lode is 1 foot wide, opening tribute ground. Our tribute department continues to look well, and we hope to do well for the next two months as we have for the past two.

**WHEEL UNY.**—We have to day (May 22) set the 40 end to drive west of Cock's shaft, by four men, 1 fm., at 21 10s. The lode in the 30 west is not so large as stated in our last; it is now 2 ft. wide, presenting a very favourable appearance for copper. The planter-lift is completed, and answers exceedingly well; the men are now engaged in dividing and casing down the underlay shaft; Cock's shaft is now raised to the 40 fm. level, and the men are timbering it down. We hope to be enabled to draw from the bottom in the course of a week.

**WHEEL VICTORIA.**—Cope's engine-shaft is now down 12 fms. 5 ft. 6 in. below the adit, and set again to day to nine men, 3 fms., at 11s. per fm. The winze in the bottom of the deep adit is sunk 3 ft.; the lode is very small, but contains good stones of ore. We have set 1 fm. to-day at 9s. per fm. We shall see by that time whether it improves in size or not.

May 21.—The shaftmen have sunk 1 fm. 5 ft. 6 in., making altogether 12 fms. 5 ft. 6 in. below the adit. They were for the first fortnight of the last month employed in putting down the pitwork. The carpenters and smiths are still employed about the capstan and shears.

**WHEEL WILLIAMS.**—The lode in the middle shaft is about 7 feet wide, composed principally of capel, quartz, munda, gossan, and some good spots of copper ore, the depth of which is 16 fms. 1 ft. 6 in. from surface, ground much the same as stated in my last. At the north lode shaft, the men are still employed in timbering and securing the rise, which is progressing with as much speed as the nature of the work will admit of.

**WOOD MINE.**—Our tribute pitches are looking very well. The lode in the bottom of the shaft is very kindly appearance, and shows lead, munda, and jack. In the adit end the lode is producing some good silver and great quantities of munda. The White Rock shaft is producing branches of lead and gossan of excellent quality. The gossan has been assayed by Mr. Longland, and the result is 16s. of silver with a trace of gold. Every part of the mine is in a most satisfactory state, and I have no doubt we shall meet with an east and west lode near the present White Rock shaft, as I have seen a very promising lode at no great distance from our set.

## FOREIGN MINES.

ALTEN MINING ASSOCIATION.—Estimated produce for April:—

Mines.	Tons of Ore.	Per Cent.	Fine Copper.
Raipas	99	6	540
Old Mine	23	6	110
United Mines	23	7	110
Mitchell's	3	7	21
Total	150		671

Mining Report from the 13th of April to the 4th of May, 1855.

**Raipas.**—The proposed communication between Labouchere's lode and Monk's shaft, in the 39 fm. level, has been accomplished, and bargains are now set on the ore part of the lode, for the purpose of making returns, and at the same time to explore the contorted stratum where the lode last disappeared. This month the whole of our workings have been prosecuted in dead ground, and no ore has been broken; but heretofore we expect the direct communication formed with the surface will enable us to make good the deficiency. We shall now use every exertion to extend the workings on the course of ore last discovered, and the favourable indications lead us to expect some good results. The 30 fm. level eastwardly has entered a hard limestone stratum, containing spots of yellow ore, but without any trace of a lode having yet been seen. The 20 cross-cut is now driving by six men, and we hope to form the proposed communication with shaft No. 2 by the end of the month, when we propose the exploration of the old workings, in which the rich bunch of ore disappeared. The horses employed on the Quenango driving, having now returned, we shall return the ores on hand from the February and March operations as soon as possible; and hope, in the next delivery, to show a favourable result, notwithstanding that no ore was broken in the last month.

**Old Mine.**—The tribute pitches at this mine are rather less productive than we anticipated, in consequence of the munda nature of the ore. The tribute pitch in the 40 fm. level continues productive, and the prospects are very promising, but the quality of the ore is still rather low. At Woodfall's, we have been obliged to stop the workings during the past week, for the purpose of securing the dangerous ground; this has now been completed, and the tributers have resumed operations, with every prospect of ultimate success. The appearance of the lode is equally promising.

**Old Mine.**—The returns for February and March are less than anticipated, in consequence of the quality having unexpectedly deteriorated. The annals and picking stuff are not included in the estimate, as these will be returned in the summer after being properly dressed and prepared. The foot stope in Slings' sink continues to yield good returns of ore, but the roof does not equal our expectations; the returns from this place will, however, more than cover the cost, which, in this bargain, is very little. The eastern

## New Patents.

## LIST OF PATENTS GRANTED DURING THE PAST WEEK.

W. Watt, Glasgow, manufacturing chemist, for improvements in the treatment of flax or other fibrous substances, and the application of some of the products to certain purposes.  
D. Dick, Paisley, Renfrew, machine-maker, for improvements in the manufacture and treatment of finishing of textile fabrics and materials.  
E. Roberts, Manchester, engineer, for certain improvements in and applicable to boats, ships, and other vessels.  
J. H. Brown, Aberdeen, and J. Mackintosh, of the same place, for improvements in the manufacture of paper and articles of paper.  
L. V. Ruzé, manufacturer, Gaillon, France, for certain improvements in the manufacture of hat-plush and other similar silk cloths.  
J. J. Russell, Wednesbury, Stafford, patent tube manufacturer, for improvements in coating metal tubes.  
E. T. Bainbridge, St. Paul's Church-yard, for improvements in obtaining power when S. C. Lister, Manchester, near Bradford, York, machine wool-comber, improvements in treating and preparing, before being spun, wool, cotton, and other fibrous materials.  
J. Swarbrick, Blackburn, Lancashire, fire-brick manufacturer, for certain improvements in the method of manufacturing retorts used for gas and other purposes, and in the apparatus connected therewith.  
A. V. Newton, Chancery lane, mechanical draughtsman, for certain improvements in winnowing machines.  
T. K. Parker, London wall, carpenter, for improvements in window sashes.  
J. Silbert, of the firm of Messrs. Elabrick and Co., of Prague, Bohemia, for improvements in furnaces, and in heating and utilising certain products of combustion.  
J. Mason, Rochdale, Lancashire, machine maker, and G. Collier, Halifax, York, manager, for certain improvements in preparing, spinning, twisting, doubling, and weaving cotton, wool, and other fibrous materials; also in tools or apparatus for constructing parts of machinery used in such manufactures.  
J. Walker, jun., Wolverhampton, merchant, for certain improvements in vacuum pans for the evaporation and crystallisation of saccharine or other solutions.  
H. Webster, Manthorpe, Lincoln, wheelwright, for improvements in regulating the draft in chimneys or flues.

## DESIGNS FOR ARTICLES OF UTILITY REGISTERED.

J. Wanthler, Wilmington-square, portable and house barometer.—W. C. Cambridge-Bristol, straw shaker.—R. Mallet, Dublin, iron plate for roofs.—C. Lenny, Croydon, carriage-wheel plate.—A. J. Schaff, St. James's, Royal Cambridge valve bugle.—R. W. Windell, Birmingham, spring letter balance.—W. Quinton and Co., Birmingham, rule joint.—W. Day and Co., London-bridge, cradle machine for washing and gold detecting.—G. Harriot, North Walsham, screw clod crusher.—C. Richards, Birmingham, core peg for Minie rifle-bullet moulds.—*Mechanics' Magazine.*

## MINING NOTABILIA.

## [EXTRACTS FROM OUR CORRESPONDENCE.]

**THE GAWTON MINE** is situated in Tavistock, Devon, immediately adjoining the River Tamar; in a most promising mining locality, near Devon Great Consols, Bedford United, Wheal Arthur, Hignston Down Consols, and other equally good concerns, if properly worked. This mine was worked a considerable period since; a large quantity of useful work was then done, which will be available to the present adventurers. The old workings consist of an adit level, driven under the hill the distance of from 100 to 200 fms., and the sinking of a winze on the course of the lode about 4 or 5 ft., when they were obliged to suspend it, owing to the quickness of the water. In this winze there is a course of ore gone down 10 inches wide—solid yellow ore. The old miners in the neighbourhood state that when the lead is cleared out there will be found pitches in the back that will set at a moderate tribute. In addition to this, the men have discovered a large gossan lode in the south part of the set, between 7 and 8 feet wide, which alone is one of the most promising speculations of the day. One of the men then working cannot compare it with anything that ever he saw but that champion of all lodes—the lode at Devon Great Consols. The gossan is exactly of the same description as that discovered at Wheal Maria on her first onset, and to use his own terms, "tis burnt up like a cinder." The set is held of John Bayly, Esq., of Plymouth, for a long term of years, and at moderate dues.

**WHEAL TREMAR.**—I was at the mine yesterday, and am much pleased to find it looking so exceedingly promising. In sinking the perpendicular shaft about three weeks since, they unexpectedly cut a lode, which continued in the shaft several fathoms, producing large stones of rich ore, although they have now sunk through it, and intend going down 4 fms. more, when they will drive to cut it, as well as the main lode; and if (which there is every reason to expect) it continues as good as it was in the shaft, where it underlaid out, there is not the slightest doubt but that we shall at once have a good mine and a profitable one.—*Liskeard, May 15.*

In our advertising columns will be found a notice of the sale of the properties of the Earl of Shannon, in Ireland, which undoubtedly offer a fine field for the safe and profitable investment of capital. They produce an annual income of £1800, and are estimated by valuation of Mr. P. White, C.E. (by order of the Commissioners), at £6000 per annum. There are also title rents amounting to £400 a year, and presentations to livings, of nearly 10000 per annum. These several estates possess such numerous and varied advantages in a mineral, agricultural, and marine point of view, that every class of purchasers may be suited; while a climate, remarkable for salubrity and mildness, with scenery of the most picturesque character, and a locality long noted for its peaceful peasantry, we expect will raise much competition to become possessors.

**THE MINERS' OWN GOLD COMPANY.**—This undertaking has been established on the principle of uniting the interest of the miner with that of the shareholder, and not the employment of officers and men under a merely ordinary engagement for wages, each miner being required to take 50 shares, or to be nominated by a shareholder to the extent of 100, by either of which he will be entitled to a free passage, in a first-class ship, to the colony, be provided with a dwelling at the diggings, and liberally boarded. The produce of the operations is to form a common stock, to be thus divided:—shareholders in England, having the privilege of nominating a miner, by which is meant any persons willing to work and comply with the regulations; with such nominee, working as a miner, residing at the company's station, to be found provisions to have 25 per cent.; shareholders working as miners, 50 per cent.; the remaining 25 per cent. to be divided between the committee of management in London and the purser in the colony. Steam power and most approved machinery will be forwarded, and a lease of an estate in the gold district of Victoria has been secured. The capital is £20,000, in shares of 100 each; deposit, 5s. per share.

**THE ATMOSPHERIC RAILWAY.**—Among the numerous patents taken out for atmospheric propulsion during the few years that the construction of railways caused such unhealthy excitement was one which we noticed at the time, patented by Mr. Bragg, of Pontonville, a model of which the patentee has recently constructed on a larger scale than the one he originally exhibited, and which is now open for public inspection. The principle consists of a series of tubes, laid along the line between the rails alternating with each other, the upper end of one tube overlapping the lower end of the next. Each of these tubes forms a cylinder, in which works a piston, with a rod of sufficient length to reach the opening in the pipe in advance. Connected to the piston rod is a frame and rack, carried along with it; and by a suitable arrangement on the under part of the leading carriage, the train is carried along by a succession of impulses, which, however, as the grip is secured on one piston rod before it is off the preceding one, such motion becomes continuous. The patentee will feel pleasure in fully describing the arrangement to parties interested.

The submarine communication between Holyhead and Howth, by means of the electric telegraph, will be opened in the course of a few days. The cable, 70 miles long, is being shipped on board one of her Majesty's steamers, which has been placed at the disposal of the promoters.

## ACCIDENTS.

**Aberdare.**—The inquest on the 65 sufferers from the explosion at the Middle Dyffryn Colliery was concluded on Tuesday last, when Mr. Mackworth, the Government Inspector, produced an elaborate report, in which he stated he had examined the workings on several occasions, in order to arrive at a correct conclusion. Since 1845 there had been four serious explosions in this seam, by which 159 persons had been lost; sudden blowers in each being the cause assigned. The air-courses appeared sufficient for general ventilation, but were inadequate sufficiently to dilute gas from sudden eruptions of gas and render it safe, while the general arrangements were by no means satisfactory; and some valuable suggestions, made by Mr. Blackwell, had been entirely disregarded. He suggested that separate verdicts should be given on those who were killed by the explosion, and those who were killed by the after-damp, to teach coal proprietors the necessity of making the shafts and airways strong enough to resist the explosion, by which he was sure the mortality would be greatly diminished. The coroner having summed up, after 2½ hours' deliberation, returned the following verdict:—"In the case of Thomas Fritchard, we find a verdict of 'Accidental death,' and are of opinion that the Middle Dyffryn pit was at the time in a good state of ventilation for ordinary purposes; but that a fall in No. 2 cross-belt, the fire, then ignited, and caused the explosion which resulted in such a great sacrifice of human life. We are also of opinion that there is no neglect or culpability attached to any of the agents or men in their employment; notwithstanding, we much regret that the recommendation of the jury and the suggestions of Mr. Blackwell, in the report on the occasion of the last explosion, had not been complied with; and we earnestly recommend that the proprietor be enjoined to adopt Mr. Blackwell's plan of ventilation, especially the dumb drift."

**Geendrech.**—Not one of the bodies of the 27 hapless men and boys, who perished by the awful inundation, has yet been recovered—the pit remaining full of water. The widows and children left amount to 50; and a meeting has been held at Llanelli, when a committee was appointed to collect subscriptions. About 2500 £ was collected in the room—the Bishop of St. David's and Earl Cawdor giving 200 each, and Mr. W. Chambers, the chairman, 250.

**Risca.**—J. Wood was killed by a fall of coal at the Blackvein Colliery.

**Wigan.**—J. Lomas fell down the shaft at Messrs. Wright and Taylor's Colliery, Whalley and died of the injuries he received.

**Bilston.**—John Robins and his two sons were proceeding to their work in a coal pit, belonging to Mr. Riley, when the lads having descended first, the father heard a cry of distress, instantly alighted down the rope, and finding one of his sons in a state of insensibility, placed him in the skip, and he was drawn up. On going down to their assistance, the father and remaining son were found insensible from choke damp, and quickly got to surface, when the two boys recovered, but all efforts to restore the father were in vain.

**Derbyshire.**—T. Taylor was killed by a fall of rubbish in Capesfield Colliery.

**Derbyshire.**—B. Moe fell down the shaft at Mapperley pit, and was killed.

**Swansea.**—James Rucroft was killed by a fall of roof at the Bay Colliery.

**Wigan.**—J. Anderson was killed at Gerard's Bridge Colliery, by an explosion.

## Current Prices of Metals, Stocks, &amp; Shares.

## METAL MARKET, London, May 28, 1852.

ENGLISH IRON.		ENGLISH COPPER.	
Bar iron bolts	£4 15 0	Tin, 14 to 28 lbs. b	per ton £92 0 0
In Wales b	4 12 6	Tough cake b	93 0 0
In Liverpool b	4 15 0	Sheeting and bolts b	p. lb. 0 0 104
In Staffordshire a	— 5 5 0	Sheet b	0 0 104
Sheets, single a	7 2 6	Bottoms b	0 0 114
" double a	8 12 6	Old a	0 0 94
Hoop a	6 12 6	Yellow Metal b	0 0 84
Nail rod, round a	5 15 0	Wetterstedt's Pat. Metal b	1 11 0
" square a	5 15 0		
Rails (Wales) c	— 5 10 0	FOREIGN COPPER.	
(Staffordshire) c	— 5 5 0	South American	per ton —
Pig, No. 1, Clyde c	— 1 19 0	ENGLISH LEAD.	
3-4ths No. 1 & 2-3ths No. 3	— 1 19 0	Pig	per ton 16 10 0-17 0 0
No. 1, in Wales b	— 2 15 0	Sheet	17 10 0
Stirling's Patent 7 Wales	— 2 10 0	FOREIGN LEAD.	
Toughened Pig 7 Wales	3 10 0	Spanish, in bond	16 0 0
FOREIGN IRON.		ENGLISH TIN.	
Swedish	11 0 0-11 5 0	Block	per cwt. £4 7 0
Russian CCND	— 17 0 0	Bar	4 8 0
Indian Charcoal Pigs in 7	— 5 10 0	FOREIGN TIN.	
London	— 5 10 0	Banca	— 4 7 6
FOREIGN STEEL.		Straits (uncertified)	— 4 6 6
Swedish keg	15 0 0	TIN-PLATES.	
Ditto faggot	15 0 0	IC Charcoal	per box 1 6 6-1 8 0
SPELTER.		IX ditto	1 13 0-1 14 0
On the spot	15 10 0	IX Coke	1 2 6-1 3 0
To arrive	15 12 6-15 15 0	IX ditto	1 8 6-1 9 0
ZINC.		Canada plates a	per ton 9 10 0-10 10 0
In sheets sheet a	20 0 0	QUICKSILVER f	per lb. 0 3 0
Terms.—a, 24 per cent. dis.; b, 3 ditto; c, nett; d, 1½ per cent. dis.; e, 2 ditto; f, 1½.			
* Delivered in Liverpool 10s. per ton less.—† Dis. for cash in 14 days, 10 per cent.			

The IRON MARKET has continued very firm, without alteration in prices. In Scotch Pig-iron business has taken place at last week's prices, and holders ask 3s. to 3s. 6d. mixed numbers cash, and 3s. 6d. to 40s. per ton three months' open, free on board in Glasgow.

RAILS are rather more inquired for, but prices remain the same.

RAILS are in very good request, and large orders are on hand. The principal makers are full for two or three months.

STAFFORDSHIRE IRON has been in improved demand. Makers are not anxious to take orders, except at advanced rates.

SPELTER has been without transactions worthy of note. The price is firm at 15s. 10s. on the spot, and 15s. 12s. 6d. to 15s. 15s. to arrive.

COPPER continues extremely scarce. A further advance is expected.

THE TIN MARKET has been without movement of any kind.

TIN-PLATES sell largely at current rates.

LEAD is in active request.

GLASGOW, MAY 27.—As the shipments continue short this month, the courage of speculators has been a good deal damped, and prices have declined 1s. per ton; and the market to day closed heavily with sellers at the quotations—many parties being anxious to realise the profit on their late purchases.

Mixed Nos., good brands, free on board here ... 38s. 6d. to 39s. 6d. per ton, cash.  
No. 1, ditto ditto ... 39s. 6d. to 39s. 6d. ditto  
No. 1 Gartscherie ditto ... 41s. 0d. to 41s. 6d. ditto

**MINES.**—The market for British mining shares has been much less active this week, which may be partly attributed to holiday excitement. Wheal Buller has been sold at 680; South Tolgus, 160; Condurrow, 105; West Providence, 49; Tremayne, 23; Alfred Consols, 14; Lewis, 12; Merilyn, 7½; Bedford, 6; West Alfred Consols, 26; Tincroft, 11½. A few bargains have been done in Clives, Cljib, Cubert, Garreg, Great Wheal Badern, Prince Albert, South Tamar, Wheal Harriett, Great Bryn, Kilbricken, Orsedd, and West Wheal Alfred, at the market prices. In Cornwall, Wheal Buller has been sold at 705, East Pool at 100, and Wheal Reeth at 75.

In the Metal Market.—Prices generally continue in the ascendancy. Iron and Lead are in great request, particularly rails, in which there has been much activity, and large transactions have taken place. Generally, the workpeople of the iron districts are employed, while fresh furnaces are about to be put in blast. Both Copper and Tin continue scarce; and a further advance anticipated in price. Tin-Plates have gone off extensively at current rates; trade very brisk in them. A parcel of copper regulus from the Kapunda Mine, South Australia, was sold on Tuesday, at the Swansea ticketing—150 tons—averaging 46½ lbs. 4d. per ton, realising 7004½; and an advance in the standard then took place, fully equal to that in Cornwall of the Thursday preceding.

## DIVIDENDS DECLARED IN MAY.

Mines	Per Share.	Amount.
Devon Great Consols	£7 0 0	£7168 0 0
Wheal Buller	17 10 0	4180 0 0
Alfred Consols	0 16 0	4056 0 0
West Providence	2 10 0	2560 0 0
Great Polgooth	0 4 0	2200 0 0
Wheal Looe	2 10 0	1075 0 0
South Frances	4 0 0	992 0 0
Trevelick	7 10 0	900 0 0
Wheal Reeth	3 0 0	720 0 0
Tremayne	0 10 0	512 0 0
Botallack	5 0 0	500 0 0
Balteswidden	0 5 0	405 0 0
Total		£25,609 0 0

The sale of copper ore at Thursday's Ticketing was 2995 tons, amounting to 15,734½ lbs. 6d., the average produce and standard being 6½, 117½ ss. The corresponding sale last month was 2526 tons, produce 6½, 116½ ss., being an advance of above 27 per cent.

Polbore Mines sold 20 tons tin to Calenick House, at 52½ ss. 6d. per ton. East Balteswidden sold 1 ton 6 cwt. 0 q. 6 lbs. of tin at 51½ ss. The Cubert Mines sold 30 tons of silver-lead ore, at 12½ ss. 6d. per ton. From Boringdon Park Mine, two parcels of silver-lead ore have been sold—No. 1, 4 tons 12 cwt. 1 qr., at 23½ ss. 10s., to Messrs. Sims, Williams, and Co.; and No. 2, 3 tons 11 cwt. 3 qrs., at 11½ ss. 6d., to the Tamar Smelting Company. The caunter lode recently discovered in the adit level has been driven upon 2 fms., and is 3 to 4 ft. wide, a good ore lode. In the 15 fm. level west the lode is leady throughout, and the greater part is being saved.

From East Boringdon Mine, two parcels of silver-lead ore have been sold—No. 1, 4 tons 3 cwt., at 20½ ss. 6d., to the Tamar Smelting Company; and No. 2, 8 tons 5 cwt. 1 qr., at 13½ ss., to Messrs. Locke and Co. The tributaries in the 20 fm. level east are breaking some good work. The shaft is down 10 fms. under the 28 fm. level.

Wheal Anna Consols having about 1½ ton of black tin nearly ready for sale, from the old stamps, to ascertain the price, sold ½ ton; and as inferior tin from the clearing up was, of course, in it, the price obtained (53½ per ton) is considered very good. The ground is much improved in the cross-cut towards the lode.

Great Wheal Badern sampled, on Wednesday, 70 tons of ore, being 10 tons over estimate. The stopes and pitches are turning out favourably, and the mine opening well for lead as it deepens. The tin ground at Kenworthy's is also turning out fair work for the stamps.

North Basset sampled 171 tons of good quality copper ore on 26th inst. Unity Consols have sampled 35 tons of copper ore from Lambo, estimated worth 6½ per ton, and are going to the smelting-house in a few days with 5 tons of black tin for sale.

At Botallack Mine quarterly meeting, on the 24th inst., the accounts showed—Balance last account, 72½ ss. 7d.; copper ore sold, 1012½ ss. 11d.; ditto tin, 2209½ ss. 7d.; leavings, 149½ ss. 2d.; sundries, 87½ ss. 2d.—5531½ ss. 6d.—Dues, 140½ ss. 3d.; labour cost, 1736½ ss. 7d.; coals, 183½ ss. 10d.; carriage of coals and tin, 142½ ss. 9d.; Stannary dues and stamps, 9½ ss. 2d.; merchants' bills, 615½ ss. 4d.; dividend, 500½ ss. leaving balance to next account, 203½ ss. 6d., the profit being 631½ ss. 11d. A dividend of 5½ per share was declared.

At Wheal Reeth meeting, on Tuesday, the accounts for Jan., Feb., and March, showed—Balance last account, 752½ ss. 4d.; ores sold (less dues), 3251½ ss. 6d.—4004½ ss. 10d.—Costs and merchants' bills, 2569½ ss. 8d.; by dividend of 3½ per share, 720½ ss. leaving balance in favour of the adventurers, 715½ ss. 2d.

At West Wheal Providence quarterly meeting, on the 19th inst., the accounts showed—Balance last account, 190½ ss. 6d.; copper ore sold, 23½ tons, 222½ ss. 5d.; black tin, 86 tons 0 cwt. 2 qrs. 18 lbs., 4536½ ss. 4d.; arsenic, 60½ ss.; carriage, 43½ ss. (less lords' dues, 267½ ss. 8d.)—4784½ ss. 7d.—Labour cost January, 553½ ss. 11d.; ditto Feb., 529½ ss. 9d.; ditto March, 628½ ss. 6d.; merchants' bills, 446½ ss. 9d.; leaving 2625½ ss. 8d. profit; from which deduct dividend, 2560½ ss. leaving balance in hand, 65½ ss. 8d. A dividend of 50s. per share was declared. The engine-

shaft is down to the 93 fm. level. The 83 is worth 10½ per fm.; the 70 12½; the stopes in the 60, 15½; the 50, 25½; and the 40, west of St. Aubyn's shaft, 12½ per fm.

At Wheal Tremayne bi-monthly meeting, on the 21st inst., the accounts showed—Balance last account, 99½ ss. 11d.; sale of 109½ tons of copper ore, 466½ ss. 6d.; 65 tons 1 cwt. 1 qr. 4 lbs. of black tin, 3328½ ss. 16s.; carriage, 32½ ss. 6d. (less lords' dues, 189½ ss. 9d.)—3638½ ss. 3d.—Labour cost Jan., 1030½ ss. 9d.; ditto Feb., 972½ ss. 11d.; merchants' bills, 1058½ ss. 2d.; leaving profit, 677½ ss. 4d.; from which deduct dividend, 512½ ss. leaving balance in hand, 165½ ss. 4d. A dividend of 10s. per share was declared. The 83 fm. level is worth 18½ per fm.; the 73, 10½; cross-cut at Wallis's, 12½. The lode in the 63, west of Allen's, is worth 14½; and winze sinking under ditto, 12½ per fm. At west whim-shaft, in the 57, lode worth 10½ per fathom.

At the Bolenowe Mine meeting, on Thursday, the accounts for Feb. and March showed—Total costs, 200½ ss. 11.—Receipts, 843½ ss. 7d.; leaving balance in favour of mine, 642½ ss. 8d. The operations at the mine are progressing with great spirit.

At Wheal Owles meeting, on the 21st inst., the accounts showed—Tin sold, 4385½ ss. 6d.; tin leavings, 92½ ss. 1d.; received tributaries' subsist, &c., 271½ ss. 11d.—4749½ ss. 6d.—To labour cost, 1995½ ss. 11d.; merchants' bills, 1130½ ss. 10d.; subsist, carriage, &c., 393½ ss. 3d.; showing profit of 1229½ ss. 6d. The debtor balance at last account being 1918½ ss. 2d., leaves balance to next account of 689½ ss. 8d.

At Wheal Trebane meeting, on 19th inst., the accounts showed a balance in favour of the mine, 270½ ss. 6d.

At Prince Albert Consols bi-monthly meeting, held yesterday (Chester Cheston, Esq., in the chair), the accounts showed—Balance last account, 199½ ss. 9d.; calls received, 768½ ss. 9d.—Feb. cost, 220½ ss.; March, 192½ ss. 11d.; office expenses, secretary's salary, &c., 17½ ss. 7d.; stationery, 21½ ss. 6d.; auditors, 8½ ss.; hotel expenses, 5½ ss.; leaving balance to next account, 502½ ss. 9d.—Arrears of calls due, 166½ ss.; call due 6th July, 512½ ss.; ore in stock, about 900½, makes 2080½ ss. 9d. assets, against liabilities, April and May cost, 500½, and sundries, 20½ ss. leaving balance, 1560½ ss. 9d. A finance committee of four, and the chairman, were elected for the ensuing two months, and thanks unanimously voted to Capt. John Davies for his unremitting exertions. Five tons of tin are ready for the smelting-house, and about 14 tons more at surface.

At South Caradon Mine bi-monthly meeting, the accounts showed—Copper ore sold, 3143½ ss. 6d.—Tutwork, 823½ ss. 2d.; tribute, 869½ ss.; charges on ore, 76½ ss. 1d.; lords' dues, 167½ ss. 4d.; merchants' bills, 547½ ss.; sundry labour, carriage, &c., 649½ ss. 9d.; leaving a profit of 9½ ss. 2d., which, deducted from balance last account, 455½ ss. 2d., leaves balance to next account, 446½ ss. 2d. Kitow's shaft is down to the 60 fm. level, and preparing to sink deeper. The 65 east is worth 15½ per fm.; west 16½; in the winze sinking from the 50, about 20 fms. east, the lode is worth 16½ per fm.; the levels on Clymo's lode are ore but not rich; in a winze under the 84 the lode is worth 16½ per fm.; the caunter lode in the 34 is worth 15½ per fm.; the winze is holed to the 72, lode worth 8½ per fathom; Webb's lode in the 60 is worth 10½ per fm.; the 40 west 24½ per fm. Other levels on this lode are ore, and opening tribute ground. The 50, on the north lode, is worth 12½ per fm., and all in whole to surface; two cross-cuts are driving to cut it in the 30 and 70, expecting to intersect it very shortly. Upon the whole, the prospects are very good.

At Wheal Margaret meeting, on Tuesday, the accounts for Jan., Feb., and March showed—Balance from last account, 167½ ss. 6d.; ores sold, 2507½ ss. 6d.—2675½ ss.—Mine costs and merchants' bills, 2406½ ss. 7d.; balance for new engine, 50½ ss. leaving now in hand, 219½ ss. 5d.

At Runnford Cooombe Mine general meeting, on Tuesday, Captain Dunn, at the request of the shareholders, gave in his resignation; when a call of 2s. 6d. per share was made. The committee, at a meeting on Thursday, appointed Capt. John Paul (of Tavistock) superintendent of the mine, by whom a captain of the works will be selected forthwith. This mine has long needed the active superintendence of an engineer worthy the confidence of the shareholders; and the appointment of an agent of Capt. Paul's standing cannot fail to be satisfactory to all interested in the success of the adventure. Capt. Paul having inspected the mine, has furnished a favourable report to the directors, which we shall notice in our next.

At Devon and Courtney Consols bi-monthly meeting, on May 19, the accounts showed—Balance last account, 158½ ss. 10d.; costs for March (including merchants' bills, 285½ ss. 8d.), 471½ ss. 1d.; April (including bills and calls unpaid on 232 forfeited shares, 118½ ss.), 316½ ss. 9d.—946½ ss. 8d.—Call in March, 588½ ss.; leaving balance against the mine 357½ ss. 8d. A call of 3s. per share was made. The engine-shaft is down 10 feet below the 70; the ground is of an easier and more favourable character; in the same level west the lode in the bottom, for 4 fms. long, has a leader of ore, apparently on the top of a bunch; and the back eastward is worth 10½ per fm. The stopes in the bottom of the 60 west are worth from 15½ to 18½ per fm.; evidently an improvement since the former bi-monthly meeting.

At Trebarvah Mine half-yearly meeting, on the 5th May, the accounts showed—Balance last account, 86½ ss. 10d.; labour cost, 950½ ss. 1d.; merchants' bills, 240½ ss. 8d.; lords' dues, 25½ ss. 1d.—1302½ ss. 8d.—Received for tinstuff, 109½ ss. 9d.; copper ore, 736½ ss. 5d.; call due, 256½ ss. leaving balance to next account, 200½ ss. 6d. A call of 5s. per share was made. They are raising some very rich quality ore; the returns are increasing both in quantity and quality; the cost is light, and water charge easy. The prospects altogether are exceedingly good.

At Wheal Vention meeting, yesterday, a call of 10s. per share was made. At Wheal Neptune bi-monthly meeting, on the 17th inst., the accounts showed—Balance last account, 158½ ss. 6d.; labour cost for February, 102½ ss. 4d.; March ditto, 94½ ss. 8d.; merchants' bills, 117½ ss. 7d.—472½ ss. 1d.—By call in March, 256½ ss. leaving balance to next account, 216½ ss. 1d. A call of 5s. per share was made, and the purser authorised to overdraw the bank account, but not beyond 250½.

At Wheal Chiverton bi-monthly meeting, on the 17th inst., the accounts showed—Balance last account, 508½ ss. 12d.; labour cost for February, 186½ ss. 10d.; March, 217½ ss. 4d.; merchants' bills, 183½ ss.; lords' dues, 14½ ss. 2d.—1111½ ss. 3d.—By call, 512½ ss.; tin sold, 262½ ss. 5d.; leaving balance to next account, 337½ ss. 10d., which was agreed to be divided pro rata, equal to a call of 6s. 7d. per share. The engine-shaft is down to a 30, from whence a cross-cut is to be driven to intersect Neptune copper lode; then, by driving east and west, intersect the north and south tin lodes, all of which may be effected in three or four weeks. The pitches in the 20 west, on north tin lode, look very well. The stuff they have been raising has been large in quantity, but not so in value; better prospects appear as they get deeper.

At the West Basset bi-monthly meeting, on Thursday, the accounts showed—Mine cost, Feb. and March, 976½ ss.—Receipts, 177½ ss. 7d.; leaving balance, 982½ ss. 5d. By ore bills in hand, not yet due, and claims not received, 982½ ss. 7d. A call of 10s. per share was made, payable on the 17th June. There have been 70 tons of copper ore sampled this week, and the reports from the mine are highly satisfactory.

At Tregadock Mine bi-monthly meeting, on Saturday last, the accounts showed—Calls received, 542½ ss.—Balance last account, 26½ ss. 7d.; March cost, including cost of the steam engine, 270½ ss. 10d.; April cost, 123½ ss. 6d.; leaving balance to next account, 121½ ss. 1d. Arrears of calls unpaid, 58½ ss. A call of 10s. per share was made. Capt. W. Penrose's salary was increased to 8½ ss. per month. The engine-house is up, and the boiler is nearly repaired.

At Tregorden Mine bi-monthly meeting, on the 19th inst., the accounts showed—Balance last account, 557l. 16s.; costs for Feb., 227l. 11s. 1d.; March, 163l. 19s. 2d.; lord's dues, 6l. 12s. 2d.; interest and commission, 15l. 6s. 8d. = 971l. 5s. 1d.—Call, 672l.; silver-lead ore sold, 102l. 18s.; leaving balance to next account, 196l. 7s. 1d.; calls in arrears, 152l. 9s. 6d., the pursuer being desired to proceed against the parties, unless paid within a fortnight. A call of 1l. 10s. per share was made. The shaft has been sunk 5 fms. deeper, the lode still disordered, and ground unsettled.

At Boscan Mine meeting, the accounts showed—Balance last account, 232l. 3s.; costs and merchants' bills, 638l. 11s. = 870l. 14s.—By ores sold, 447l. 11s. 6d.; sale of materials, 37l. 0s. 10d.; sixth call, 240l.; leaving balance against adventurers, 146l. 1s. 8d.

At Great Wheel Fortune meeting, on 21st inst., the accounts showed a balance against the mine of 145l. 5s. 7d. A call of 1l. per share was made.

At the Vale of Towey Mine meeting, held at the Jamaica Coffee-house, on Thursday last (P. Clay, Esq., in the chair), the accounts showed—Balance from last account, 528l. 2s. 1d.; five months' cost to end of March, 652l. 9s. 1d.; merchants' bills, 132l. 19s. 6d.; lords' dues, 21l. 10s. 8d. = 1335l. 1s. 3s.—By sale of lead ore, 729l. 17s. 9d.; rough barytes, 19 tons, 11l. 17s. 6d.; calls, 640l.; leaving a balance in favour of adventurers of 46l. 14s. A very favourable report, from Capt. Jenkins, was read; and it was resolved to make a call of 2l. 10s. per share, to pay for the 50-in. cylinder engine, pitwork, &c.—17, payable 30th June; 1l. the 30th Sept.; and 10s. the 30th Nov.

At West Wheel Seton meeting, on Monday, the accounts for March and April showed—Balance from last account, 197l. 6s. 7d.; costs and merchants' bills, 868l. 8s. 9d. = 1065l. 15s. 4d.—By ores sold (less dues), 808l. 5s. 4d.; call in March, 200l.; leaving a balance against the adventurers of 57l. 10s.

At the Old Brimpts meeting, on Wednesday, it was resolved that, in the present state of the company's finances, a large number of shareholders not having paid their calls, it is deemed advisable to discontinue the working of the mine. The plant, machinery, and materials will be sold by auction, at the Mart, Bartholomew-lane, by Messrs. White and Son, of Union-court, and further particulars will be found in our advertising columns.

At Wheel Trawane two-monthly meeting, on Saturday, letters were read from Capt. Spargo, of Callington, and from the captain at the mine, recommending the most profitable course to be pursued in working, when it was accordingly determined that a powerful pumping engine should be erected, in addition to the one now on the mine, and an additional number of hands should be employed in sinking the south shaft. A small call was made to carry these resolutions into effect. This mine has now passed into entirely new hands, who have the means, and, we are glad to find, intend to work it vigorously.

At South Wheel Charlotte meeting, on the 20th inst., a call of 1l. per share was made. In consequence of encouraging prospects, an engine is at once to be erected, for the purpose of effectually working the sett.

At the Coed Mawr Pool Company's bi-monthly meeting, last week, it was announced that most of the working operations had been resumed in full activity, after a long suspension from the want of rain. The lake and the reservoirs were again filled, and steps had been taken to connect the two wheels, by which the supply would be so regulated in future as to maintain the works in actual operation for a much longer period than was previously practicable. A similar failure in the supply of working power will, therefore, probably not again occur. The lead sold at the last Holywell ticketing was 16 tons 11 cwt., and fetched 10l. 16s. per ton, which is above the average price. Subsequent accounts from the mine announce that the No. 3 lode had been laid open, and had been driven on east and west. It was found to be 8 ft. wide, with 5 in. of solid ore, a specimen of which had been forwarded to the company's offices. This discovery is in addition to the lead now taking up from the No. 1 lode and Jones's sink, which continue to improve in the descent, and is found good in the driving. The leading object of the present operations in this quarter is to effect a communication from Jones's sink to the No. 1 engine-shaft, thus to ventilate the levels driven therefrom, and enable additional hands to be put on to take up the lead. In these drivings, several tons of ore, almost pure, had been secured within the past week, and the ground was everywhere encouraging. No doubt was entertained that the No. 1 lode from the No. 2 shaft, would be found equally satisfactory, and the mine would then be producing lead in four separate quarters. Moreover, the laying open of the No. 3 lode will be followed next month by further drivings towards Nos. 4 and 5 lodes, which, it is fully expected, will also be found productive, as the surface workings yield good ore. The company have just received a report from Joseph Watson, Esq., F.G.S., consulting mining engineer and assayer, who surveyed the mine during the present month, and who concludes his report in the following words:—"As the mine is now in full work, it is my opinion, judging from the number and size of the lodes, from the value of their contents, and from the manner in which the mine has been developed, that, with a well-derivated plan of operations, a quantity of not less than from 150 to 200 tons of ore per month may be brought to grass."

An excellent run of ore has been cut in the Westminster Mines. In sinking the shaft 2 fathoms (about 10 ft. long), from 25 to 30 tons of ore have been raised. The mine is now paying very large profits. This result is well deserved by the spirited adventurers, whose perseverance must be admired by those who have witnessed the large outlay made by them for several years past, when the prospects were far from cheering.

At Wheel Arthur, they expect to sample next week 70 tons of copper ore. The mine is opening well downwards.

At Wheel Harriet, they expect to sample 30 tons of copper ore on Tuesday next. The mine is opening well.

At South Tolgus, the levels are in an improving state and looking well. The 32 west is worth for copper ore 1 ton per fm.; the 42 west, 1 ton; the 66 east, 1 ton; Youren's lode in the 54 west, 1½ ton per fathom.

At Warleggan Consols, the branch of tin in the bottom of the adit has been sunk 1 fathom deeper since last report, and has produced some good quality work.

The news from Okel Tor Mine is indicative of immediate success in the explorations. A letter from the pursuer of the 24th says:—"In the cross-cut north the ground is most favourable for the copper lode, and very wet; we expect to cut it every fathom driving."

At Marke Valley Mine, the stopes in the 65 are yielding 9 tons of copper ore per fm.; the winze is turning out 8 tons per fm.; and the stopes in the bottom of midway level 10 tons of ore per fm. Preparations are making to sink Fawcett's shaft.

At Tincroft, the prospects are as good as ever, and from North Tincroft lode a parcel of copper ore, 85 tons, worth 700l., will be sold on Thursday.

At Trannack and Bosence, they purpose erecting a suitable steam pumping engine, in order to explore under the present flattering prospects in higher levels.

At West Towan, in Caroline's shaft, the lode is very large and spotted with tin. The 15 and 25 are opening tribute ground. The west shaft will be down to the 25 in the course of a week. The steam-stamps have gone to work.

At Bevas Moor, they expect to be down for a 35 fm. level by the end of the month. Wrey's shaft is communicated to the 20. The level west is resumed, there being a strong kindly lode 3 feet wide; in the adit west it is 2 ft. wide, with spots of ore and muncie.

At Lower Bat Holes, they have commenced a new shaft from surface, in excellent ground for sinking. This mine is quite in an infant state, being only 25 fms. under adit.

At Clive Mine, a great improvement has taken place in Summers's shaft—upwards of 3 tons of excellent lead ore have been extracted in sinking only 4½ ft.; the lode continues to improve as it deepens, which is an exceedingly favourable indication. A new shaft is sinking on the patch, the lode large, and yielding good lead ore, mixed with gossan. The water will at once be drawn from the winze, and sinking continued, the lode being worth 1½ ton of lead ore per fm., and ground favourable.

At Cwm Erfin Mine, although they have no new discovery, and the workings are unprofitable at present, the ends in the 10 and 45 west are being wrought on very promising lodes—the former yielding a little ore.

At Bedford United, the lode in the bottom level east is yielding 6½ tons of copper ore per fm., and in the level over 5 tons.

At Devon Barra Barra, a level has been driven on the course of the Gate-post lode about 3 fms. The lode is producing rich grey ore, mixed with abundance of malachite, in appearance and quality superior to anything before seen in the mine. The ore has become much softer and larger grained, and is richest in the bottom of the level. The dressing is proceeding regularly, as the ore is broken daily, and it is estimated that the quantity now raised, in course of driving alone, will more than pay all the cost of the mine. The brake lodes will be cut in about a fortnight; and from the rich ore seen in those lodes at the adit level, and the fine metalliferous stratum in which they are found, no doubt is entertained of their productiveness. The crusher is being erected, and a good sampling of ore is expected to be made about midsummer. On Thursday, a sample of copper ore was assayed from the end of the level on the Gate-post lode, which produced 57½ per cent.

Mr. William Wood, agent of the Royal Hibernian Mining Company, has been elected a member of the Society for the Promotion of Irish Manufacture and Industry. Mr. John Gallie proposed, and Mr. A. H. Bagot seconded, the admission of Mr. Wood; the directors of the company were much pleased for their spirit, and high opinions were expressed as to the anticipated successful results of their enterprise from present prospects.

We understand the bed of salt discovered at Carrickfergus, in Ireland, by Mr. Pickering, gives as yet no sign of showing its extreme depth; it is still hard and solid, and it is conceived that this rock salt is to a considerable extent taking the place of the new red sandstone overlaying the coal measures, and that the usual parting between the salt and the coal will here be found extremely thin. Should this prove to be the case, it will be a very unusual circumstance, and add much to the value of the latter, by obtaining the coal at shallower levels than would otherwise have been the case.

A very satisfactory report has been made by the agent of Chyprase Consols to the committee, in which he states that the Old Mine is drained to the 36 fm. level, where the prospects are good, and the lode whole to the surface. By extending the levels there, much tin will be obtained. The stamps are expected to be ready next week, when regular sales of tin will take place.

During the week shares have changed hands in South Tolgus, West Alfred Consols, Merilyn, Wheel Buller, Condurrow, Tremayne, Bedford United, West Providence, Lewis, Tincroft, Wheel Golden, Bryntal, Trevelyan, Garreg, Orsedd, Tregardock, South Tamar, West Wheel Alfred, Robins, West Robins, Cubert, Clifflah and Wentworth, Clive, Great Bryn, Wheel Harriet, Trevena, Fanny, Chiverton, Kilbricken, Hennock, Trebarvah, Crebhor, Beacon, North Crenver, Union Tin, Weston, Prince Albert, East Alfred, South Carn Brea, Perran Wheel Jane, East Russell, East Boringdon, Boringdon Park, Cwmylee, West Ding Dong, Nancegollan, West Polgoth, Cook's Kitchen, Mining Company of Ireland, East Rashleigh, East Trescoll, North Trelawny, Alfred Consols, Great Polgoth.

In Foreign Mines, shares have changed hands in Linares, St. John del Rey, Cobre, United Mexican, Santiago, &c.

At the half-yearly meeting of the Imperial Brazilian Mining Company, on Thursday, the financial statement showed the expenditure for six months, ending Dec., 1851, to be 6557l. 17s. 5d. The returns of gold had been 15 lbs. 5 ozs. 5 dwts. 12 grs. from Bananal; and 61 lbs. 1 oz. 1 dwt. from Gongo; together realising 2923l. 10s. 1d.; leaving a loss of 3634l. 7s. 4d.; consequently, a sale of 2500l. out of the reserved fund had been found necessary; leaving only 13,000l. in stock, 3½ per cent., below which the trustees felt it would be unwise to reduce it; accordingly, the directors had made a call of 10s. per share, payable on or before the 1st of August next. Their intention is to abandon Bananal altogether, and bring all the force to bear on Gongo Soco.

The Alten Mining Company have received advices to the 4th of May. The produce of copper ore for April was estimated at 115 tons, or 6½ tons of copper, the yield of only three weeks' working. At Raipas, the communication between Labouchere's lode and Monk's shaft in the 30 has been accomplished, and bargains set on the ore part of the lode.

The Baden Chartered Silver Mines have received a very satisfactory report from their agents. It appears that the deep adit on one of their lodes has cut into ore ground with a back of 40 fms., which in the level above proved productive for 300 fathoms in length. By this, a dividend is ensured early in the summer.

The Linares Mining Company have received advices to the 15th May, from Mr. Henry Thomas. Ore weighed in, 52½ tons. Pig-lead in stock, 566 tons. Preparations are making to sink the engine-shaft below the 55. The lode in the 65 end, west of San Anton winze, is worth 1 ton of lead ore per fathom; the 55, east of Buena Ventura winze, 2 tons; the eastern stopes, 2½ tons; the 55, east of Las Nieves, 1½ ton; the 45, east of Esperanza winze, 2½ tons; west, ½ ton; the 31, east of Shaw's, 1½ ton; Thorne's shaft, ½ ton per fathom, and ground rather hard. The tributaries generally are doing well.

The Copiapo Mining Company have received advices to the 26th March. The produce of copper for Feb. was 51 tons. The want of native labourers continues to be felt, both at Checo and San Carlos Mines. The prospects at Flamenco and La Reina are greatly improved. At Fin Hallada Silver Mine is looking well in the 15 and 20 fm. levels, and with the winze producing some good ore. The new shaft is down 25 varas, and is sinking as fast as possible by six men. The other silver mines are improving.

The market for gold mining shares presents no feature of the slightest novelty, but it may be noticed that the general flatness, previously reported by us as prevalent throughout the market, has this week been even more strongly observable. The purchases both of the Australian and Californian shares have been extremely limited, and where sales have offered, a reduction in price has in most cases been necessitated. More than one description has actually been sold at a discount of 10s. on the 1l. paid. Agua Fria has been sold at par, and all the Californian shares are decidedly out of favour. This is in a great measure attributable to the dissatisfaction generally felt at the entire absence of explanations from either Col. Fremont or Mr. Sargent—the only one of the companies showing any degree of firmness being the Anglo-Californian, which is in no way connected with either party. The arrivals of gold from our Australian colonies continue numerous and important, and combined with the repeated accounts of the extraordinary yield of the gold fields, are eminently calculated to induce firmness among the holders of shares, whose operations are to be carried out in that quarter. The latest quotations are—Agua Fria, par to ½ prem.; Anglo-Californian, ½ to ¾ prem.; Australasian, ¾ to 1½ prem.; Australian Freehold, ½ to ¾ dis.; Ave Maria, ¾ to 1 dis.; British Australian Gold, ¾ to 1 dis.; Carsons Creek, ½ dis. to ¾ prem.; Colonial Gold, ½ dis. to par; Golden Mountain, ½ to ¾ dis.; Lake Bathurst, ½ to ¾ dis.; New Granada, ¾ to 1 dis.; Nouveau Monde, ½ dis. to par; Port Philip, ½ dis. to ¾ prem.; Quartz Rock, ½ to ¾ dis.; West Mariposa, ½ to ¾ dis.; Australian Consols, ½ dis. to par; Melbourne, par to ½ prem.; Yuba River, ½ dis. to par; Royal Australian Mining and Refining, ½ dis. to ¾ prem.; Liberty, ¾ to 1½ prem.; Britannia, ¾ to 1½ prem.

Grand Duchy of Baden, ½ to ¾ prem.; English and Australian Copper ruled at 1½ to 1 dis.; Glenaulin, ½ to ¾ prem. Some amount of business was done in Liberty shares.

Irish Channel Submarine was firm at ¾ to 1; Crystal Palace, par to ½ prem.

Business has been done in the shares of the Britannia Gold Mine, for the coming out, at ¾ to 1½ prem. We understand the number of shares applied for is so extraordinary, that some difficulty will be experienced in making a prompt allotment of so small a capital amongst so many applicants, but that it will be effected with all practicable dispatch.

The London and Sydney Gold Mining Company are prepared to dispatch their commissioner and staff by the first steam conveyance.

The business in Bank shares has again been both numerous and important, and, though the upward movement of prices has not been so marked, higher prices have been realised for many descriptions, including Colonial, Union of London, and National of Ireland shares. Other stocks firm. Sales are recorded in—Australasia (40l. paid), 47; Colonial (25l. paid), 14½; London Joint-Stock (10l. paid), 18½; National Provincial of England (35l. paid), 42½; National of Ireland (22½l. paid), 19½; Oriental Bank Corporation (25l. paid), 35; Provincial of Ireland (25l. paid), 45½; Union of Australia (25l. paid), 43; Union of London (10l. paid), 16½.

Holders of Dock stocks in some instances stand out for higher prices, and thus business is restricted. London stock, however, has been freely dealt in at the improved figure of 128½. Southampton Dock shares have risen to 27. Commercial Stock is firm at 90½.

Steamboat shares are well supported, with more business doing. Peninsular and Oriental are still looking up, the Old shares marking 83½ and 83, and the New, 35½ and 35. Royal Mail steam are good, with transactions at 74½, 74¾, and 74½. General Steam Navigation are quoted 28½. The General Screw Steam Shipping Company's shares have been freely dealt in on the Stock Exchange, and are now officially marked. Transactions were at first effected in these shares, on which 50l. has been paid, at 49 and 48½, but the price has since risen to 51, or 1 prem. Australian Royal Mail Steam shares have been done at 2l., or par.

Insurance shares are firm, with the exception of Provident Life, which have fallen to 36. The General Reversionary and Investment Society's shares are quoted 94½; Reversionary Interest Society, 100; Equitable Reversionary, 117; ditto New, 10; London Reversionary, 15.

Miscellaneous shares are quoted—Assam Tea Company, 10; Australian Agricultural, 16½; Australian Trust, 21½; British American Land, 25 ex. div.; Canada Company, 50; Hudson's Bay Stock, 206; Price's Patent Candle Company, 22½; South Australian, 24.

## LEAD ORES

Sold at the Mine, on the 19th May.

Mines.	Tons.	Price per Ton.	Purchasers.
Cubert United Silver-Lead	30	412 2 6	Sims, Williams, & Co.
Sold at the Mine			
East Wheel Rose	72	13 9 0	R. Michell & Son.
ditto	23	13 9 0	ditto
ditto	9	12 9 0	Tamar Company.
ditto	6	4 15 0	Sims & Co.
ditto	7	15 10 0	R. Michell & Son.
ditto	5	9 3 0	Sims & Co.
ditto	5	14 5 0	ditto

Ticketings at the King's Head Hotel, Holywell, 37th May.

Pantymwyn	15	£10 3 0	Walker, Parker, & Co.
Pen-yr-henblas	19	10 18 0	Newton, Keates, & Co.
Westminster	60	11 4 0	Walker, Parker, & Co.
ditto	60	11 4 0	ditto
ditto	30	11 4 0	ditto
Jamaica	29	8 16 0	Newton, Keates, & Co.
Maesyaafn	70	11 5 6	ditto
ditto	54	14 0 0	Walker, Parker, & Co.
Millwr	24	11 8 6	J. P. Eytton.
Fron Fownog	13	10 11 0	Walker, Parker, & Co.
Pantymwyn	12	11 12 0	Newton, Keates, & Co.
ditto	2	14 0 6	J. P. Eytton.
Black Craig	50	10 12 0	Newton, Keates, & Co.

## BLACK TIN

Mine.	Tons.	c. q. r. lbs.	Price per Ton.	Purchasers.
East Balleiswidden	1	6 0 0	£51 10 0	Calenick House.
Polberro	20	0 0 0	52 2 6	

## COPPER ORES.

Sampled May 6, and Sold at Swansea, May 25.

Mines.	Tons.	Prod.	Price.	Mines.	Tons.	Prod.	Price.
Berehaven	130	104	£9 0 6	Cobre	60	22½	£20 3 6
ditto	119	11	9 8 0	ditto	56	22½	20 7 6
ditto	118	102	9 1 6	ditto	16	164	13 15 0
ditto	117	102	8 17 6	Kapunda	42	53½	48 9 0
ditto	99	118	9 16 0	ditto	33	53½	48 3 0
ditto	83	103	9 9 6	ditto	29	53½	48 10 6
Knockmahon	123	82	7 14 0	ditto	27	54	48 2 6
ditto	102	91	8 13 0	ditto	19	34½	35 9 0
ditto	74	82	7 10 0	Ballymurtagh	48	41	3 9 6
ditto	46	91	7 16 6	Manx	24	71	6 1 0
ditto	37	9	7 13 6	ditto	13	23	2 0 0
ditto	30	92	8 8 0	ditto	1	54	4 3 6
Cobre	100	14½	13 0 6	Lackamore	16	54	4 1 6
ditto	96	15	12 19 6	Ballygahan	23	5	4 0 6
ditto	66	21½	19 8 6	ditto	7	61	5 4 6
ditto	53	24½	21 16 6				

## TOTAL PRODUCE.

Berehaven	656	£6067 9 0	Ballymurtagh	48	£166 16 0
Knockmahon	412	3276 3 6	Lackamore	38	175 7 6
Cobre	447	7558 7 6	Ballygahan	16	65 4 0
Kapunda	180	7004 0 0		30	129 3 0

## COMPANIES BY WHOM THE ORES WERE PURCHASED.

Company.	Tons.	Amount.
English Copper Company	66	£479 4 0
Freeman and Company	241	2325 18 3
Grenfell and Sons	252	3689 3 0
Sims, Williams, and Company	243	4261 8 0
Vivian and Sons	343	5318 1 6
Williams, Foster, and Company	267	3264 13 6
Mines Royal Company	27	302 7 6
English and Australian Company	27	578 7 3
British and Foreign Company	62	1471 18 3
Mason and Elkington	29	1407 4 6
Low's Patent Company	212	1643 5 9
Total	1797	£24,442 10 6

Copper ores for sale 8th June.—Cobre, 96, 83, 77, 61, 60, 50, 46, 36, 7, 73, 70, 18, 80—Knockmahon, 87, 74, 56, 55—Berehaven, 117, 78—Kapunda, 40, 31, 32—Kawaw, 54—Australian, 15, 12, 10, 8, 5—Spanish, 40—Comorres, 11—Cronebane, 2—Tigrany, 2—Australian, 1—Total, 1490 tons.

## AVERAGES.

Produce.	Price.	Standard.
British	94	£8 8 6
Foreign	27½	24 8 0
Sale	15½	£13 12 0
Totals—British 1200; Foreign, 597 = 1797 tons (21 cwt.)		£102 17 0

## AVERAGES OF LAST SALE.

Produce.	Price.	Standard.
British	82	£7 9 0
Foreign	19 5-16	16 11 0
Sale	15½	£13 9 0
Totals—British, 444; Foreign, 859 = 1303 tons (21 cwt.)		£100 0 0

## COPPER ORES.

Sampled May 12, and Sold at the Royal Hotel, Truro, May 27.

Mines.			Tons.	Price.	Mines.			Tons.	Price.
Perran St. George	107	£3	13	0	Trevisey	75	£4	9	6
ditto	83	5	3	6	ditto	74	8	13	0
ditto	75	3	15	0	ditto	59	5	1	6
ditto	71	5	7	6	ditto	39	3	3	6
ditto	59	2	10	6	South Caradon	67	7	0	0
ditto	47	4	14	0	ditto	64	10	5	6
ditto	46	3	0	0	ditto	54	7	16	0
ditto	39	2	5	6	ditto	36	10	3	0
ditto	38	1	17	0	ditto	30	4	9	0
ditto	35	2	10	6	Far Consols	94	6	13	0
ditto	29	6	18	0	ditto	78	4	1	0
ditto	19	2	15	6	ditto	61	6	10	6
United Mines	91	6	13	6	South Tolgus	71	7	4	0
ditto	82	4	5	0	ditto	53	4	10	0
ditto	75	5	10	6	ditto	28	14	7	6
ditto	72	5	8	6	Wheel Clifford	82	3	0	0
ditto	44	2	15	6	ditto	10	3	14	6
ditto	27	2	12	0	Treleigh Consols.	41	9	6	0
ditto	25	6	4	6	ditto	34	4	14	0
ditto	24	2	19	0	ditto	12	2	15	0
ditto	21	2	15	0	Trethellan	80	3	13	6
Consolidated	100	7	18	0	Wheal Uny	50	2	0	6
ditto	90	5	1	6	Wheal Ellen	29	6	2	0
ditto	70	6	0	0	ditto	11	1	15	6
ditto	61	6	12	0	East Wh. Lelsure	40	2	17	0
ditto	55	6	12	0	Clijah & Went	23	2	0	0
ditto	40	5	17	6	East Tolgus	21	3	3	6
ditto	33	2	12	6	Wheal Music	18	6	7	0
Trevisey	90	4	14	0	Gt. Wh. Lelsure.	16	3	13	0

**ROYAL GARDENS, VAUXHALL.—OPENING NIGHT, MONDAY.**—FAREWELL ASCENT OF THE VETERAN GREEN IN THE NASSAU BALLOON. The Director respectfully acquaints the nobility, gentry, and the public that the Gardens will be opened for the SEASON on MONDAY the 31st inst., with a new grand ballet entitled *ZELIA*, the MAID OF CALABRIA, supported by celebrated artists from the Grand Opera at Paris, and assisted by a complete corps de ballet. A concert, with a full choir of madrigalists and distinguished vocalists. Dramatic scenes, the Arctic Regions, the Lake of Lucerne, and the great picture of the Piazada Toros at Madrid, splendid cafés, the Hall of the Golden Lilies, and the Vintage Bower. The dance music is under the direction of M. Arban, and Deane's Military Band will perform various new selections, arranged expressly for the Gardens. The PYROTECHNIC DISPLAY will be on the usual scale of splendour. The equestrian arena has been transformed into an elegant THEATRE DE BALLET, with private boxes, stalls, pit, and amphitheatre. On this occasion the doors will be open at Five o'clock. Admission Half-a-Crown.

#### NOTICES TO CORRESPONDENTS.

**PANORAMIC HISTORY OF MINING IN DEVON AND EAST CORNWALL.**—W. P. C. inquires what has become of his friend John Paul, not having seen a word about his famous history for the last eight or nine months?

**A Subscriber** is anxious to know whether a china or porcelain clay bed can be legally worked by a company under the Coal-Work System? This, he presumes, must depend on the question,—Is china clay a mineral? which he believes it to be, but understands it is a subject of dispute amongst scientific men.

**RYAN HIBERNIAN MINING COMPANY.**—We have received the communication of J. S. C. on the subject of the "meeting," and the advantages derivable by the employment of English capital in mining enterprise in Ireland; but, as such is treated upon in another column, and as we shall have occasion to refer to the subject in next week's Journal, we do not deem it necessary to insert his letter. That much benefit may arise we cannot doubt, and we trust the motive will be daily appreciated.

**ST. AGNES BRACON MINE.**—The communication of A. Subscriber (St. Agnes) shall appear in our next:—reaching us late on Friday, compels its postponement.

**An Engineer (Southwark).**—A full description of Siemens's regenerative condenser was given in the *Mining Journal* of the 18th May, 1850. It consists of a series of copper plates, 8-32nds of an inch thick, 4 ft. wide, and 2 ft. long, laid together with two longitudinal metal strips between each, leaving spaces of equal thickness with the plates—the whole being screwed up tightly together, and placed in a rectangular vessel, constituting the body of the condenser. In his condenser, Mr. Siemens has achieved the important object of condensing the steam in such manner that the condensing water issues into the hot well at boiling temperature, and yet produces an efficient vacuum in the working cylinder. By this plan, a considerable portion of the steam escapes, the remaining portion is condensed with a minimum of water, and the escaping steam may be used to effect a draught in the chimney, which, with the boiling water, effects a saving of at least 10 per cent. It is less expensive and more compact than other condensing engines, and can be attached to any existing high or low-pressure engine.

**ST. ENOCH'S MINING COMPANY.**—Can any of your correspondents inform a shareholder the residence of Mr. W. J. Payne, the secretary of this mine?—H. Cornwall, May 25.

**J. D.**—We should be very glad to publish particulars of the mines referred to, but the proceedings are kept so secret, that we are unable to obtain anything sufficiently accurate for publication. If our correspondent could assist us, we should feel obliged.

**J. N. (Glasgow).**—Our correspondent will observe, that from the subject of the production of gold and silver being elaborately treated in a leading article in this day's Journal, it is unnecessary to insert his communication, although interesting. His estimates are so low that Solomon collected more than double the quantity of gold and silver than has been produced in the first 50 years of the present century.

**WREAL SETON.**—Sir: Who were the adventurers at the two special meetings, and what number of shares do they hold? I particularly wish to know, as I had no notice of such meetings.—F. C., Ashburton, May 24.

**Tyro (Tavistock).**—Phillips, although a sulphuret of copper, is very different to common copper pyrites. Specimens from Cornwall have been found to contain—Copper, 58.20; sulphur, 36.98; iron, 1.84; and from Killarney—Copper, 61.07; sulphur, 33.75; iron, 1.40; gangue, 0.50. It is of a reddish-brown colour, and almost metallic lustre; the surface generally iridescent, with different shades of blue, purple, and red. This ore has become of some importance since the re-working of the mines in Tuscany. The crystals are either cubic or octahedra; but as yet have only been found in the mines of Dolcoath and Tincroft. Siberia malachite contains from 70 to 71 per cent. of oxide of copper.

**E. P. (Carrickfergus)** will find in another column a summary of the Patent Law Amendment Bill. The first Government fee, as named in the bill, is 5s., but we suppose the expense of the provisional specification, agency, &c., would make it 8s. or 10s.

**GOLD IN DEVONSHIRE.**—A reader, referring to the reported discovery of gold in North Bovey River, hopes that the particulars will be forwarded for publication. He says—"If gold is to be found in the decomposed ferruginous granite of this neighbourhood, the most likely place would be between Moreton hamstead and the village of Doccum, on the old road towards Exeter, as for a distance of two miles it abounds in rock of the before-mentioned description."

**J. S. B. (Bath).**—We inserted the problem in our Journal some years since, but which did not elicit a reply.

**A. Timan (Chelsea).**—Canada Plates, which will be found in our metal price current quoted from 9s. 10s. to 10s. 10s. per ton, are not tinned plates; they are sheet iron of the best quality, cast into plates of convenient size for various purposes, for easy exportation to Canada. They are well known in the trade.

**M.**—The proximate assay of gold in rich ores will be seen by referring to the advertisement of the Carsons Creek Company, published to-day in our Journal. The several specimens of quartz differ so materially, that no correct judgment can be arrived at previous to the ores being crushed. The poorer ores are submitted to amalgamation; but the richer are, immediately after stamping and washing, fit for the crucible.

**T. K. (Loughborough)** shall be answered next week.

**An Old Subscriber (Swindon).**—A good account of gold washing by hand will be found in Mawe's "Mineralogy." A cradle is commonly used in California, but the mode in which tin is dressed in Cornwall may be effectually used.

**Builder (Lewisham).**—The best and most rapidly effective system of boring for water, or the discovery of coal and other minerals, is undoubtedly Favre's, a descriptive paper on which was read at the meeting of the British Association, in 1846, and a notice of it appeared in our Journal of the 26th Sept., in that year. His apparatus is composed of hollow boring rods, formed of wrought iron, screwed end to end, the lowest being armed with a perforating tool suitable to the strata to be bored through, whose diameter is larger than the rod, leaving an annular space, through which water and the excavated material rises. A force-pump is connected by flexible tubes to the upper part of the hollow rod, by the action of which, a current of water is forced down the hole, which brings up all the triturated strata, and the rods need not be removed to clear out the orifice; while another advantage presents itself, as the boring tool never gets clogged up with great depths. This discovery shows the advantage of acute observation. In 1833 Favre was present at the boring of an Artesian well, and abundant water was found. On enlarging the orifice to admit the tubing, he noticed that the current of water brought up the excavated material as fast as formed, and the tools were never removed. It immediately struck him that, by hollow rods and force-pump, he could imitate this operation of nature, and his experiments were perfectly successful.

**Mr. St. Pierre Foley's** letter on the Mining Company of Wales shall appear next week.

#### The Coal-Work System.

Having repeated applications for particulars respecting the Coal-Work System, we have reprinted, as a pamphlet, the paper descriptive of its principles and practice, which appeared in the *Mining Journal*. Copies can be procured through any bookseller or newsmen, or at our office, price 6d.

\* It is particularly requested that all communications may be addressed—

TO THE EDITOR,  
Mining Journal Office,  
26, FLEET STREET, LONDON.

Post-office orders made payable to Wm. Salmon Mansell, as acting for the proprietors.

## THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, MAY 29, 1852.

We have frequently had to contrast liberality on the one hand against the reverse of it on the other, as regards the conduct of the various mining lords in the granting and renewal of sets. With considerable satisfaction we gave in our Journal of the 17th April last an account of the prosperity which had resulted at Lelant, owing principally to the lords of the mines in that locality having some years ago acted with that spirit of extreme liberality evinced by them, whereby their mineral property became, from a vast wilderness, "a mine of wealth," not only to themselves, by large receipts of dues therefrom, but to the fortunate shareholders, who have been handsomely remunerated by dividends, and now hold an extensive and valuable property, likely to prove of benefit to themselves and the large population of labourers around, for a long series of years to come. Where 30 years ago there were not 10 miners in the parish, there are at this moment 3000 employed in the mines, within the circle of little more than half a mile! Does not this speak volumes. It is with much regret, then, we observe that recently a grasping spirit has evinced itself in the renewal of mine sets, calculated to damp, enterprize, and entirely different to the acts of the late lamented Lord DE DUNSTONVILLE, the present Earl of FALMOUTH, Mr. PRAED, Mr. GILBERT MR. SERPENS, and others. We may almost date this SHYLOCK system of exaction from the period when South Caradon became highly prosperous; around which, as a nucleus, was created at once into life a numerous set of demi-satellites, or petty lords and ladies, ready to pounce upon those willing to try their luck in the unexplored ground around, not only on the continuation east and west of the lodes discovered, but on others imaginarily supposed to be parallel. No sooner was one exaction complied with, than higher terms were sought for, and so on *ad infinitum*: it was useless to look for a sett around, large or small, for which a bonus was not demanded, and in general paid down before the ink was dry upon the grant or deed. We need not here point out how unsuccessful all those grants turned out: all proving failures but three—the losses sustained by the legion far ex-

ceeding the profits derived from the lesser number. During the scramble for sets, parties flew around like bees to a hive, just as we now learn they rush in search of gold to the "diggings," and the result is, many were soon ruined by their heedless folly.

Some years after, the great Wheal Maria astonished the mining world, selling on the 23d of April, 1846, one month's produce, 1430 tons of ore, for 10,278l. 4s. 6d.; last month it amounted to only 73 tons, realizing but 695l. 8s. 6d. What, then, would have been the result had not additional ground been conceded by the lord to the present company? Had he not from time to time, and when needed, granted to them Wheal Fanny, Josiah, Anna Maria, where would Maria be now? By the addition of these sets, they have been enabled to keep up the tonnage and amount of sales, and make dividends, which otherwise they could not have done. This fortunate discovery, or prize, drew competitors for sets adjoining out of number. One instance shall suffice—that of Wheal Williams. Upon a mere supposition that the lode of Great Wheal Maria passed through, there was a great competition to obtain it, and the terms submitted to were 1-12th dues, and 30 per cent. of the profits. The shares fetched an enormous premium, although they sold not ore enough to pay the salaries; and the cost of obtaining the deeds actually exceeded all the dues money paid to the lord. Thus the concern became a wreck, and was abandoned. The money sacrificed here and around amounts to a considerably larger sum than the profits derived from the Great Maria. Notwithstanding which the lords and others are, at this very moment, holding out for 12th and 14th for their mines ("knocked" years since), and refuse to grant unless those ridiculous exactions are submitted to, bonuses paid down, and even the first raising of 50 or 100 tons of ore conceded over to them.

We regret to observe, by way of conclusion to this article, that a similar spirit of extortion has arisen in a quarter from whence it should never have been suffered to emanate; and, could the dead speak, the hand that dictated it would have been palsied ere it would have been allowed to cast, as it were, even a shadow likely to tarnish the walls of the baronial halls at Tehidy. Such an act of covetousness has, however, been perpetrated. We not only recorded the fact in our Journal of the 8th inst., as regards North Basset, which company was made to pay a bonus "for a renewal of the lease, 5500l.," but nearly the same individuals had to submit to exactly the same servile terms and conditions in three or four other sets. *Necessitas non habet legem.* We have not language strong enough to depict our depreciation of such dealings; and therefore hope, for the brief space such a party is in power, all those whose leases, whether for mines or other property, are about expiring will be prepared for the result, and lose not a moment in securing what they require, for delays are at all times dangerous.

The exciting interest which at the present time is agitating the commercial communities of Europe and America, from the vastly increasing production of gold, caused by the recent extensive discoveries in Australia and California, renders most opportune some statistical tables and remarks in the *Times* (May 31), arranged by our correspondent, Mr. W. BIRKMYRE, who has been carefully investigating the subject for some years, and has consulted every accessible authority, both British and foreign. From these tables, we find that the comparative value of gold and silver produced in 1846, two years before the gold discoveries in California, and 1850, are as follows:—

	Gold.	Silver.	Total.	Gold.	Silver.	Total.
Europe, &c.	4,845,192	1,254,306	5,799,498	5,812,533	1,528,592	6,840,975
Africa, &c.	—	—	—	—	—	—
N. & S. Am.	1,301,560	5,261,619	6,563,179	13,341,989	7,259,824	20,601,813
Total	6,146,752	6,515,925	12,662,677	18,654,522	8,788,416	27,442,938

Exclusive of China and Japan, which produce large quantities of gold and silver, the amount of which is quite unknown to Europeans.

The above quantities are probably less than the actual production, as the duties on gold from the private mines of Russia are heavy, varying from 12 to 24 per cent.; in Austria, 10 per cent.; Brazil, 5 per cent., which are said to lead to much smuggling. In the United States, where there are no duties, the gold and silver included in the above summary are only the quantities brought to the mints to be coined, there being no means of returning the quantity used in jewellery and other manufactures. The next table is similar to the above, but given in weight instead of money, from which it appears the produce of gold has risen from 114,674 lbs. in 1846, to 365,950 lbs. in 1850; while silver had only increased from 1,979,084 lbs. in 1846, to 2,663,386 lbs. in 1850. The greater part of this increase in silver is from Mexico, arising from restored tranquillity, richer mines, and greater skill; while it is worthy of notice that this increase has taken place at a time when many thousands sterling of British capital have been sacrificed in the attempt to work the Mexican silver mines, owing probably to want of experience in the best modes of working, the mischief of share jobbing, and other causes. Certain it is, the natives find it a profitable adventure, and the old Spaniards realised by the Valenciana Mine alone the almost fabulous profit of 240,000l. annually—a profit larger than all the tin and copper mines of England. The produce of gold last year in California Mr. BIRKMYRE puts down as equal to 17,339,554l., and in Australia 1,000,000l.; and large as this would make the entire sum, it is likely to be exceeded by the produce of 1852. It is confidently expected that recent discoveries will raise the Californian produce to 21,000,000l.; while Australia is estimated to yield 6,000,000l., making the total for the current year nearly 34,000,000l., or upwards of 661,000 lbs. troy. Taking the amount of silver at 9,234,122l., gives as the total produce of the precious metals for the year 42,930,310l.

The average yearly coinage of gold during the first 30 years of this century was—in Great Britain, 1,700,000l.; France, 1,300,000l.; in the United States, 55,000l.; total, 3,055,000l. The following is a statement of the recent gold coinage in the same countries, beginning with the year in which the gold discovery was made in California:—

	Great Britain.	France.	United States.	Total.
1848	£2,451,999	£1,234,472	785,565	£4,472,036
1849	2,177,000	1,084,389	1,875,158	5,136,547
1850	1,491,000	3,407,691	6,695,354	11,594,045
1851	10 months	10,077,252	12,919,695	—

The gold coinage last year in the United States exceeded by 3,398,927l. the largest coinage of the same metal ever made in the United Kingdom; and the coinage in France during the first 10 months exceeded by 556,494l. the memorable gold coinage in this country of 9,520,758l. in the year 1821.

The comparative quantity of bullion in the Bank of England in May, 1848 and 1852, is given as 12,826,108l. and 20,231,037l.; in that of France, 3,534,165l. and 23,506,204l.; and in that of New York, 1,404,125l. and 2,029,448l. respectively—showing a total increase in 1852 of 28,002,291l. The amount in the Bank of England is 3,592,722l. more than was ever before held in its coffers. Notwithstanding the great increase in the produce of gold relative to silver, it is a curious fact that the price of the latter has not risen, but rather fallen. In the week ended 17th April last, 580,000 lbs. of silver were sold for 5s. per oz., being at the rate of 64s. 9d. per lb. for pure silver, or 15.74 lbs. of silver equal to 1 lb. of pure gold; while in January, 1851, the relative value was 1 lb. of gold to 15.3 lbs. of silver. The produce of gold for 1852 is estimated at 242 tons, which, although 12 times the quantity produced at the commencement of the century, as respects bulk, sinks into perfect insignificance; for, if cast in bars, a closet, 9 ft. high, 8 ft. wide, and 8 ft. deep, would hold it all; while it would require 21,713 times that space to hold all the iron smelted in Great Britain annually. In a late Number of the *Athenæum*, also, is an elaborate article on the increased supplies of gold and silver from California and Australia since the year 1845—a circumstance, by the way, which shows the general interest now being excited on the subject. It is not pretended that materials exist for forming more than an approximate estimate of the stock of gold and silver in Europe and America in various forms in 1848; but the following is given as probably near the truth:—

	Silver.	Gold.
The produce of America	£1,097,000,000	£401,000,000
Europe	80,000,000	25,000,000
Russia	13,000,000	44,000,000
Africa, and other places	—	100,000,000
Total	£1,190,000,000	£570,000,000
As existing in 1850	28,000,000	12,000,000
Total	£1,218,000,000	£582,000,000
Grand total of gold and silver	£1,790,000,000	—
Deduct for exportation, wear and tear, and losses by casualties	64,000,000	—
Leaving	£1,726,000,000	—

This article then proceeds to a comparison with the production of va-

rious years; and although upon somewhat different data and different periods than Mr. BIRKMYRE's calculations, show that his estimates are not far from the truth. It concludes with some lengthened remarks on the currency of Europe and America, which we cannot at present enter into.

At the ninth anniversary festival of the IRON, HARDWARE, AND METAL TRADES' PENSION SOCIETY, recently held, Mr. HOBBS, from America, so celebrated for his acquirements in the mechanism of locks, and having opened without the keys all those in this country previously considered impregnable, was present. Although then a stranger to the members of the society, his urbanity and conviviality were immediately appreciated, and he soon made many friends. He enrolled himself a member of the institution, and offered his services to give a lecture on locks, for the benefit of the charity. This kind offer was accepted; and on Thursday evening the lecture was delivered at the London Tavern—Mr. BATH having liberally placed the large room gratuitously at the service of the society. Mr. JOHN DALE was appointed to the chair, who introduced Mr. HOBBS to the meeting. That gentleman commenced by observing that, in introducing the various locks, he must mention the makers' names; but he wished it to be understood that his remarks would refer to the locks, and not to the makers. It would not be so much a chronological history of locks as of their construction, and he should take them in the order of similarity of mechanism, rather than of time. The great principle upon which a lock should be constructed was security; and no beauty of workmanship or complexity of parts could compensate for its absence. The number of changes in permutation which could be made with a series of tumblers or slides was no security against picking, although the BRAMAH lock, with 18 slides, gave upwards of 678,651 billions of chances against making a false key to open it. A curious calculation was made,—that if a person commenced at the creation of the world, working day and night, and made one key per second up to the end of 1851, there would still remain 6042 billions of chances. The lettered-ring lock, without a key, was then described, and opened with ease by Mr. HOBBS, although he did not know at what letters it was locked; and the dial lock was also described and opened. The old Egyptian lock was then shown, being the basis of all that followed,—the security of which depended on four pins falling into corresponding holes in the bolt, and which could only be lifted by a key or instrument which would raise all at once. Various modifications of this were described: STANBURY, of America; WILLIAMS, in 1839; YALES' American lock; PRICE, in England, in 1794; THOMPSON, 1805; RUXTON, Dublin, 1816; TAM, 1843; and various others. The late Mr. CHUBB, in 1818, made the first detector lock, and to him the merit was due for what security it possessed, as all recent so-called improvements were only alterations of form, and complex additions. He considered detector locks *directors* to pick-lock practitioners.

The pyramid of locks, from the Great Exhibition, made by Mr. C. AUBIN, of Wolverhampton, was shown. It exhibited 44 locks, from an old Roman one, with all the various improvements, up to BRAMAH's, which formed the apex, and by turning the key of which, the whole 44 could be locked and unlocked. The lecture was illustrated by large wooden models lent by Professor COPPER, and diagrams; and Mr. HOBBS clearly elucidated the means he adopted for opening all the kinds of locks mentioned: by pressing upon the bolt, and moving in succession every tumbler which was bound, until it became free, when the bolt would pass. The progress of lock making in America was then remarked on, since NEWELL's check or reversed tumbler lock in 1841, which they succeeded in picking, to their last patent lock, which could not be opened without a key, and by moveable wards this could be altered, and every new arrangement of key made its own lock. Mr. NOTTAGE, the Secretary to the Society, moved a vote of thanks to Mr. HOBBS, which was seconded and carried with acclamation; thanks were also voted to Mr. BATH, for his kindly giving the use of the room; and to the chairman, when the company separated.

It is highly gratifying to find that this society is rapidly progressing under the presidency of the Earl FITZWILLIAM, who occupied the chair on the occasion of the festival. The income had increased from 1357l. in 1850, to 1486l. in 1851. Among the subscribers was his Grace the Duke of NORFOLK, 100 guineas; Earl FITZWILLIAM, 50 guineas; Mr. ROEBUCK, 5 guineas; and others, amounting altogether during the evening to upwards of 350l.

The announcement of the difficulty experienced in obtaining the location conditionally purchased by the "Nouveau Monde Company," and the consequent abandonment of that locality by their superintendent, together with the doubts as to Col. FREMONT's title, and the silence observed with regard to the disputed lease question between that gentleman and Mr. T. D. SARGENT, combined with the doubtful position of the Agua Fria Company, has in a great measure tended to paralyse speculation in that quarter, while, singularly enough, it has likewise had the effect of depressing other companies under similar circumstances, and others affected by neither of these causes, but situated in the colonial El Dorado. It is not our intention here to analyse what will be the ultimate result of this panic, sufficient it is for us at the present to know the cause. If, as in the instance of several companies, which has unfortunately proved to be the case, that they have blindly believed the statements and glowing reports which have been received from the American "promoters," it is some satisfaction to find that in every case JOHN BULL has not been so gullible. While the majority were imagining that gold could be obtained by merely picking it up, the directors of the "Carsons Creek Company," immediately on the conclusion of the agreement between the Californian proprietors and themselves, dispatched a commission, consisting of Messrs. HAWES, SANDERMAN, and CARRINGTON, to California, with instructions to ascertain the title of the present proprietors of the mining property, the lands on which it is situated, the constitution of the company, the names of the American members, their shares, the names of the officers, the fact of its having been legally incorporated according to the laws of California, consistently with the laws of the United States, and the legal incidents and consequence of such incorporation.

These instructions as to the legality are drawn up by the company's solicitors in London, in which they are requested to obtain the best legal advice to be had in San Francisco, in order to assist them in their investigation. They are further ordered in separate instructions, signed by the secretary (Mr. NESBITT), to examine as to the value of the property; to see that water communication is such as represented in the prospectus issued on the faith of the American proprietors—in fact, if the whole of the statements therein can be fully verified. They are requested to ascertain if the ore in the deepest shaft yet sunk (83 ft.) is richer than that nearer the surface; and to procure at different depths specimens from the gold quartz, which they are themselves to see broken: these to be in duplicate; one to be assayed on the spot, the other transmitted to England. The asserted accumulation of ore lying at the surface, estimated at the enormous value of 200,000l. sterling, is to be verified, so as to leave no room for doubt or cavil; and they are further to report the cost of extracting per ton from the mine, as well as the ulterior processes of crushing and extracting either by washing or quicksilver, and also the cost of transport to San Francisco, the condition of the mine, number of mules, horses, and labourers employed, as well as the machinery, and the method in which the accounts are kept. It being supposed that, in addition to gold and silver, there are deposits of copper and quicksilver in the same locality, they are required, should time permit, to report on this, and transmit specimens to England.

Our limits have not allowed us to go further into detail, but we must say that we believe the directors of the Carsons Creek Company have exercised a wiser discretion, in sending out a deputation in whom they could have confidence, than rashly trust, as we are sorry to observe has been done in several cases, on the mere *ipse dixit* of the sellers. It must be remembered, that at the Great Exhibition a piece of gold quartz was shown, which had been obtained from this mine, which has been already some time in work, and was, therefore, ushered into the market under less speculative influences, and subject to less dubious results than any of the other projects.

This enormous mass, which is advertised for sale to-day in our columns, weighs 104 pounds, and is valuable not alone on account of its mercantile worth, but also on account of the geological fact that it elucidates—that gold is not only to be found in the alluvial soil and detritus of the upper earth, but it is likewise found in its depth, this having been obtained 83 ft. from the surface, and which proves that more must exist in the same vein. Previous to realising this valuable specimen, the directors offer it to collectors and the curators of museums. In addition to its value as a specimen, its intrinsic worth must be regarded; and as it would be one of the greatest and most valuable objects in our national collection, we hope that the trustees will not let the opportunity pass of adding this unrivalled stone to the superb collection of minerals already deposited in the Museum. From the specimens received from the mine, it will be seen that the percentage of the gold assayed by two different processes has been respectively 46, 50, 65, and 68 per cent., and the gross value per ton at the same rates, 48,068*l.*, 52,248*l.*, 67,922*l.*, and 71,048*l.* Although these favourable results have been arrived at, and leave nothing to be desired, yet we think that in sending out the deputation with these copious instructions for their guidance, the directors have shown a great attention to the interests of their constituents, and are deserving of all credit for the energy and activity they have displayed. This step augurs that their future proceedings will be accompanied with economy and prudence, and it would have been well had several other directions, to whom we do not wish to allude, acted so wisely, so discreetly.

#### SCOTCH PIG-IRON TRADE.

At the commencement of this year, the stocks of Scotch pig-iron on hand here were estimated at 375,000 to 400,000 tons; and as the shipments in the months of January and February were very small, the stocks rapidly increased, and the price of mixed Nos. good brands, which was then 37*s.* per ton, declined until the middle of March to 35*s.* 6*d.* per ton. This low price caused large shipments to be made, and induced many parties to speculate, and prices advanced 12 to 15 per cent. The shipments, however, this month have fallen off considerably, compared with the month of April, and the total shipments for the first four months of this year are 20,000 tons less than during the same period of 1851, while the production has been fully as large (notwithstanding the Lugar and Clyde Works having been stopped for some time), as at the present moment there are 110 furnaces still in blast. The three furnaces at the Portland Works are likely soon to be out; but, on the other hand, the Blair Works, formerly belonging to the Ayrshire Iron Company, and recently purchased by the Messrs. Bairds, are expected to be in full operation: two furnaces are now in blast, and three others are preparing.

Shipments during Jan., Feb., March, and April 1851 .....	Tons	165,000
Ditto ditto 1852.....		145,000
Glasgow, May 26.	Decrease in 1852 .....	Tons 20,000

#### GOLD IN ENGLAND.

In continuance of our remarks on the interesting gold discoveries at North Molton, it is very curious to observe how the county of Devon generally, and even the proximity of the present workings, apparently more particularly, has been represented from the earliest period as the auriferous region of this country.

As far back as the commencement of the reign of Edward III., it appears that the inhabitants of Devon had liberty to "dig for gold and silver on their lands for two years;" and at one period of the way of this warlike prince, we are told the mines of North Devon furnished enough specie to enable him to embark in one of his campaigns; and in Tiverton, which is one of the most ancient towns in the county, as early as the reign of Alfred, one of the principal thoroughfares is called "Gold" Street, being so denominated prior to 1517, as is shown by the foundation deeds of John Greenway's curious Alms Houses, founded therein at that date. In 1377, King Richard II. appointed a deputy to search for gold throughout the county, and it is interesting to note how rivers and rivulets were there described as likely places in which to discover the precious metal. The instruction says, "as well in the banks of rivers, and in rivulets, as in other places, where it might seem to him most to the king's advantage;" and the deputy was empowered "to elect and take, wheresoever they might be found, such labourers and workmen as should be necessary for the said digging and works, and to imprison such as should resist."

Thus far it appears the works were on the King's own account, or, at least, he searched all mines and took the gold he could discover; but subsequently a more liberal course was pursued, and participation of benefit allowed to the proprietor or tenants, for we find that in 1384 a license for ten years was granted to Nicholas Wake, a priest, "to dig for gold and silver, paying tithes to the church, and one-ninth to the King." About 20 years afterwards mining operations for the precious metals evidently became much more extensive. In 1405, the Prior of Pilton was appointed "controller" over the gold mines in Devon, and as Pilton was then near to, and now forms part of, Barnstaple, which is not more than 14 miles from North Molton, the inference naturally is that the auriferous ores were then ascertained to exist in the valleys leading from Exmoor. Indeed, there is every natural as well as traditional evidence in favour of the district in question containing riches of vast extent. There is a common report throughout the neighbourhood that the "old men" who worked for copper "had a way of getting gold from it," and many of the small properties in the neighbourhood are said to have been purchased from the gold resources of these streams and valleys.

In addition to the particulars already given in reference to the geological features at the Britannia Mine, we now find that about 2 fms. north of the gold gossan lode is a lode of lime, mixed with quartz, about 5 ft. wide; and near thereto is likewise a distinct quartz lode of great breadth, which can be traced across the country to the neighbourhood of Ilfracombe. In an old letter, written about 80 years ago by a gentleman at South Molton, the "auriferous quartz" of the locality is alluded to. We have just seen a fragment of this Silurian limestone, highly crystallised by heat, brought from a depth of a few fathoms from the surface of the mine, accompanied by a piece of the quartz, which in their mineral character, as well as in appearance, closely resemble the auriferous rocks of California and Australia, and the Ural and Altai Mountains—the flanks of which are composed of claystone and limestone, metamorphosed and crystallised by granite, porphyry, and other igneous rocks which have burst through them. The quartz, particularly, merely requires the presence of streaks and veins of gold to render it strikingly similar to the auriferous quartz of those countries. There is every probability of finding the precious metal in these rocks; and although the two specimens which we have seen contain no gold apparent to the naked eye, yet it may be predicted, that as these deposits crop out, and make their appearance at the surface, at no great distance from the locality, that they will be found rich in gold, covered over by detritus, which has concealed their treasures, and preserved them from the vigilance of the early gold seekers. The question will soon be settled by the Britannia Mine, which is making every exertion to get into full working without the slightest delay, and intend to have assays made of all productions likely to contain gold. Already the necessary timber, &c., is on the spot, a full complement of miners are engaged, and it is confidently expected that within one month the old workings will be made good, the mine free from water, and stopes commenced on the gold lode.

There will, consequently, be but little suspense in the matter; a brief time, indeed, will elapse before the value of the sett will, in a great measure, be determined. If it be found rich for gold, which geologists assert it will, the shareholders will have reaped a harvest of no common average; but if otherwise, no more will have been expended than would be justifiable in testing a more ordinary point. We allude solely to gold, and leave out of the question the production of copper, which is believed to be rich and great.

A correspondent mentions that he is greatly struck with the extraordinary similarity of the appearance of the Britannia and the Agia Eria; not only with reference to the geological features, but to the pictorial appearance of the country. He likewise mentions, that the gold found in the alluvial soil near Crogan, Kinsale, in the county Wicklow, some years ago, was accompanied by fragments of oxide of iron, wolfram, grey manganese, and quartz; it was alloyed by silver. The bearing of the lode was exactly similar to that of the Britannia. We cannot now enter more fully into these interesting points, but our remarks on the subject of Gold in England shall be continued from time to time.

At Orrell Colliery, near Wigan, Messrs. W. H. Branker and Co. have, during the last week, at the depth of 500 yards from the surface, succeeded in finding the Old Orrell Mine, four feet in thickness, and of excellent quality. This is the deepest mine yet sunk in the county of Lancaster, and the proprietors are at present working four mines of coal and one of Cannel from the same shaft.

#### SUGGESTIONS FOR IMPROVING VENTILATION IN COLLIERIES.

In the *Mining Journal* of the 6th March last we inserted a communication from Mr. John Potter, C.E., of Manchester, on a method of keeping the workings of a colliery free from carbureted hydrogen, by the action of a blast of air from a blowing-machine at surface, capable of keeping up a compression of from 1 to 3 lbs. per square inch; and we have now received a continuation of the paper, descriptive of his *modus operandi*, which, as every suggestion is valuable at a time when we see almost daily around us such wholesale destruction of human life from explosions, we willingly lay before our practical readers for their consideration. It will at one glance be seen that the proposal is entirely to reverse the present system, and instead of vacuuming the upcast shaft, and obtaining a current by those natural pneumatic laws which are then brought into operation, sufficient air is to be forced into the mine, and thus drive out the fire-damp, with the products of respiration and combustion. It is presumed that the application of this mode of ventilation to mines, as at present worked, might not be altogether practicable or efficient; but in opening new workings the following plan, or a mode somewhat similar, is suggested:—

The annexed sketch represents a plan of the mine:—A, the shaft, from which a main gallery is to be excavated up the rise as far as may be judged convenient—say to the point B, which will be the highest point. At this place a main blast is to be established, the air from which will return in as direct a line as it can to the shaft A. Two side galleries, A, D, and C, D, joining each other at D, are next to be excavated. As these galleries are both of them on the rise, any fire-damp discharged into them will be conducted to the point C, and there being discharged into the main gallery, A, B, will come into contact with the returning stream of air, and be carried away with it to the shaft. The triangular mass of coal (bounded by the three galleries) will in a short space of time become free from fire-damp, and may then be holed and worked out in any direction which may be convenient. Whilst this is proceeding, other galleries, D, E, E, F, may be excavated, and another mass of coal prepared for getting in the same manner. After this mode has been carried on as far as it is found to be convenient and effective for carrying off the fire-damp, another main blast will have to be established at a distance up the rise, and on a level with the first blast established at B. The formation of side galleries may then proceed as before. A variation on this mode of proceeding, which might be advantageous, would be to make a second main gallery diagonally up the rise, as from A to G, then establishing a second main blast at G, and connecting the points B and G by a third gallery along the wall face, which would free a large mass of coal from the fire-damp.

Whilst the galleries are being excavated, a proper degree of ventilation will, of course, be required. This will be attained by carrying blasts of air forward as the work proceeds, lengthening the trunks and hose for that purpose, when necessary. H, H is the dip head level; by lengthening and continually ventilating which, and working out triangular masses of coal as described, the whole seam would be obtained, avoiding the annoyances which so frequently occur under the present system. The method proposed for conveying the compressed air to the workings is by galvanised iron tubes, or wooden trunks, of any requisite dimensions, carried down the shafts and along the roads, and when practicable let into the floors. These trunks to be formed entirely of wood; the side pieces grooved to let in the top and bottom, and held tight together by wooden screws and nuts passing through them. From these trunks the air is carried to the required points by flexible hose, and in all cases directed against the highest portions, or hollows, in the roof, where the foul gases lodge, by which means they will be eliminated. The same mode of ventilation may be applied to mines in which choke-damp, or carbonic acid, predominates; only in that case, the blast should be directed towards the floor, where that vapour is sure to accumulate.

**PARSEY'S COMPRESSED-AIR LOCOMOTIVE.**—Mr. Parsey having completed an engine on his principle, a successful trial took place on the Eastern Counties Railway on Tuesday last. Being the first experiment, to avoid accident, and by particular request, the compressed air was worked at a low density. The small engine, adapted to the narrow gauge, started from the Stratford station, and on reaching Lea-bridge was reversed, and came back to the Stratford station, a distance of four miles. Mr. Parsey drove her himself, assisted by his son, and was accompanied on the engine by Mr. Trevethick, Mr. Ashcroft, and another officer of the company, Mr. Box, proprietor, and two others, in all eight persons. A pilot engine, with persons connected with the railway, followed the compressed-air engine, to witness the trip. The effect of an engine running on the rail without heat or steam was extremely novel and imposing.

**ELECTRIC TELEGRAPH IN THE BANK OF ENGLAND.**—The electric telegraph operations, which have for some time been in progress in this establishment, are now completed, and a perfect system of communication is effected between the various offices. The rooms of the governor and deputy-governor are by this means placed in direct and immediate communication with each important department where business is transacted, and the utmost secrecy of communication is insured by the use of Dering's patent apparatus for this purpose, so that a message intended for one particular office cannot be read at any other, as is the case under the ordinary system of working.

**ACCIDENTS IN COLLIERIES.**—Mr. Dunn, the mine inspector for the northern district, is about to publish, in a cheap form, for the use and information of managers and colliers, a statement of the leading principles of ventilation, and of the arrangements best adapted to the economy and safety of an extensive colliery, pointing out various errors and oversights of bad practice in the management, which lead directly or indirectly to the loss of life; also succinct suggestions to the working colliers, in order that they may be enabled to compare the condition of their colliery with the general principles enunciated by the inspector, and that they may become acquainted with the arrangements and alterations in the ventilation, so as to enable them to form a judgment as to anything that is wrong; and in case of explosion, such knowledge may enable them to act more promptly in the restoration of the air current, and in obtaining access to those parts of the mine where the sufferers are lying. The tract will contain practical advice, with directions how to proceed in the restoration of suspended animation amidst the after-damp, and will conclude with remarks upon the scheme of insurance against the loss of life and limb, as proposed by the Accidental Death Society.

**IMPROVEMENTS IN THE DAVY LAMP.**—In the *Mining Journal* of the 24th April last we described some improvements in the safety-lamp for colliers, effected by Mr. Henderson, of Monkwearmouth, consisting of a double cylinder of glass, forming an annular space for water, which thus becomes a lens, radiating the rays of light, and greatly increasing the illuminating power. Mr. A. H. Ross, optician, of Sunderland, who has joined Mr. Henderson in the patent, has also secured a further improvement. By a simple arrangement the top of the lamp cannot be taken off until the bottom is unscrewed, and the slightest attempt to unscrew the bottom instantly extinguishes the light. The mechanism is strong, and not likely to get out of order, and by the real character of the principle of the Davy lamp will be more fully established than by any previous modification; for, as the lamp cannot be opened and continue alight; if an explosion occurs where lamps are solely used, it will be evident the flame has passed the wire gauze.

**NASMYTH'S FAN BLAST.**—In the *Mining Journal* of the 6th Sept. last we described a new arrangement of fan for ventilating mines, which had then just been suggested by Mr. Nasmyth, of Patricroft, and a model exhibited in his works there. We are now happy in being able to state that one of them has been for some time in operation at Skyer Spring Pit, the property of Earl Fitzwilliam, and it is stated that its powers are past conception. It is only necessary to put it in motion each morning a few minutes before the miners descend, when the pit is rendered quite pure, and its continuous application throughout the day keeps it thoroughly safe. Mr. Nasmyth has freely given up all right of invention to the public, in the hopes of lessening the number of fatal explosions. The fan is placed over the upcast shaft, closed from the external atmosphere, and one 7 ft. in diameter may be worked by an 14 in. pipe from the boiler, sufficient to produce a current of 20,000 cubic feet per minute. One of this power stands in a space of 9 ft. by 7 ft., being 8 ft. high.

**DISCOVERY OF COPPER ORE IN BELGIUM.**—We have received a report of a discovery of some veins of copper ore of rich quality, in the commune of Chanly, province of Luxembourg, and in those of Rostegne, Willin, and Lamprez, in Namur. They are said to lie in such peculiarly accessible positions, that the metal can be prepared for market with great facility and at small expense. Some valuable deposits of silver-lead are said to exist also on the same property, and large quantities of sulphate of barytes, of pure white colour and the finest quality, which can be raised at trifling cost, and realise large profits. It is proposed to construct smelting works at Charleroi, in the coal district, when the Great Luxembourg Railway will greatly facilitate the carriage of the materials and the refined metal to market.

#### Original Correspondence.

##### THE ABERDARE EXPLOSION—THE INSPECTOR'S REPORT, AND EXCULPATION OF THE MINERS.

SIR.—The inquest at Aberdare was resumed yesterday, when Mr. Blackwell read his report on the Middle Duffryn Colliery, the cause of the late explosion, and the measures he proposes to prevent the recurrence of similar calamities. He described the mine as being in "maiden" or unworked ground, in which the coal was highly charged with fire-damp—the more dangerous from the gas being in a condensed state, and the coal-field not being yet drained of fire-damp by other works. That in deep workings, the gas being under greater pressure, the danger was immensely greater than under ordinary circumstances, and that he "emphatically" warned the owner of this extraordinary danger in his report of the inspection of the mine in December, 1850, and strongly recommended that no naked lights whatever should be used in the mine, as he considered that the recurrence of these "blowers," and the sudden irruption of large quantities of fire-damp as not only possible but as very probable. Yet these warnings and advices have been disregarded; the men were permitted to use candles, and the return air was conveyed direct to a furnace, which had been constructed since he inspected the colliery. From the examination he had made of the mine, in conjunction with Mr. Mackworth, on Wednesday last, and from the evidence that had been given, there was no doubt but that the accident had arisen from a large and sudden discharge of gas by a fall from the roof, which had been ignited at the furnace. Had protected lights been used under proper regulations, the return air conveyed by a "dumb-drift" into the shaft at some considerable height above the furnace, and the furnace exclusively supplied with pure air from the downcast shaft, he believed this lamentable accident would not have happened. For the future he recommended that protected lights only, under proper supervision, should be used; that the return air should be conveyed to the upcast shaft through a dumb-drift, and on no account be allowed to approach or pass over the furnace; and that the quantity of the air passing through the mine be increased from the present assumed quantity of 30,000 to 60,000 cubic feet per minute. In this report Mr. Mackworth concurred; and, notwithstanding an attempt to invalidate some of its positions, they were rather strengthened and confirmed than weakened by the long examination and cross-examination to which Mr. Blackwell cheerfully submitted.

The whole case is, therefore, now officially before the public, and it certainly is one which demands more serious consideration than is usually given to these subjects. The Government Inspectors have discharged their painful and arduous duties admirably, and it remains for the press and the public not only to appreciate their valuable services, but to make a good use of them in advancing the cause of humanity. Many very important topics for discussion are suggested by this report, but which a regard to your limited space precludes being entered on at present; but there is one indisputable fact that requires immediate notice, and that cannot be too widely promulgated, and that is,—that this accident was not caused by the carelessness or foolhardiness of the men. There never, perhaps, was a case in which more pains and less scrupulous means were resorted to for the purpose of misdirecting the public censure than in this instance. We are told that the men were "all properly supplied with Davy lamps; that the men frequently open their lamps for the sake of lighting their pipes or other purposes; and this is supposed to have been the case in this instance." &c. &c. It is evident that whoever supplied this information to the reporter of the *Times* must have been in some way connected with the colliery, and, therefore, must have known that candles, and not Davy lamps, were ordinarily used in the mine, and that his statement was as false as it was unjust. It is to be hoped that the exposure of this most reprehensible attempt to malign the colliers will induce the conductors of the press and the public to listen with cautious scepticism to such insinuations in future.

Neath, May 25.

J. RICHARDSON, C.E.

#### AUSTRALIA.

SIR.—There is nothing has called forth more general remark since the discovery of a second and greater California in our own colonies, than the want of pointed energy and prompt enterprise which has characterised our acts, when compared with the vigorous efforts of the Americans in their similar emergency, and every arrival from Australia brings fresh evidence of the spirited endeavours by which they are getting the advance of our lagging footsteps, even on our own ground, and appropriating advantages we ought to make our own. It is true we have done something; we have undertaken to eclipse the proverb of carrying coals to Newcastle; our great imaginations have rivalled our own Shakespeare in originality of idea; to gild refined gold, to paint the lily, to add a perfume to the violet, was, in his mind, the climax of superfluity; but we have proposed to carry gold to Australia. And in California the Americans have also distanced us in keenness; whilst they have been digging all the gold they can at home, they have likewise sent for some to London, and with liberality in excess have conferred the crushing companies upon our metropolis instead of New York. Whilst women and children, by their unaided labour, can reap the golden harvest in abundance, the ardour of our domestic genius must have difficulties to conquer, and we subscribe hundreds of thousands to obtain gold in a more expensive but more learned way, seeking for hard rock to crush by ingenious machinery, and show our profundity and contempt of common place in costly and laborious perforations; and there is not wanting a crop of geologists who, after living a quarter of a lifetime in the colony without seeing the gold, or a whole lifetime where no gold can be seen at all, are each now prepared to point out the exact spot where these spirited enterprises are to begin. It is a strange property of gold, not sufficiently noticed by the chemist, that although in other respects the most indestructible of metals, it acquires a peculiar volatility at the temperature of 90°. It is not many months since I predicted the possibility of *agua fria* being converted to *agua caliente*, or the reverse. The Californian crushing ardour has lately been considerably cooled, and noble names must be taken as the substitute for noble metal. In about six months we may expect to receive some accurate geological information as to the prospects of gold mining property, so called, in Australia; but in the meanwhile attention may be occupied with reflections on the prudence of buying gold dear where it may be had cheap, and sending our hard earnings to obtain with difficulty what others can obtain with ease. That there are extensive bands in Australia of that mineralogical character of rock which is auriferous is now proved, and it is virgin soil; no lordly conquerors have for centuries gilded their chariot wheels with the produce of that earth. No vast cities standing for ages upon this, the solitary and last-born continent of the deep, have ransacked the surface to feed their pomp, idolatry, or commerce. The narrow strip of Californian decomposition escaped the hand of Mexican civilisation, and similarly the effluence of countless ages rests in the Australian surface undisturbed. It is the especial property, providentially ordained, of the electric agency to develop the metals upwards towards the surface. It is there the chemical conditions are combined which precipitate them from their solutions, and this is especially the case with gold, because it has the fewest affinities, and can, therefore, rarely encounter such re-agents as precipitate the more susceptible metals in veins and lodes at depths remoter from atmospheric influence. No one possessing the least degree of accurate information on the nature of gold deposits gives into the wild and antiquated notion that they are the debris of enormous parent veins. Neither coal, nor lead, nor copper, nor other metals, whose chemical affinities effect their deposition in masses in veins, are found copiously scattered in alluvial deposits. They are locked into the earth, unengaged, and this condition is at once the effect of their natural properties and laws of development, and the preventive to their superficial dispersion. Gold and tin, on the contrary, do not unite as sulphurets; they are precipitated by different modes, and from different rocks. Hundreds of square miles of auriferous bands, exposed to the extended influence of the air, give out their gold by slow decomposition, and accumulate in lapse of time—an amount of metal totally and enormously disproportioned to the casual fragments, which would be carried from the denudation of a lode. The proper theory of metalliferous deposits, as explained in Mr. Hopkins's profound work, is absolutely necessary to arrive at anything more than mere guess work on this question. The practical chemistry of the earth is a totally different thing from the doctrine of igneous projectiles. The metals are electrolysed on their proper rocks, and it is only astonishing, after the applications which have been made of this art, notoriously to be seen (Great Exhibition to wit), that the word "igneous rock" should continue to encumber and confound the geologist's vocabulary. But those who care to understand the subject will appreciate that the quantity of gold to be obtained for picking up from the surface of an enormous and hitherto undisturbed continent may probably exceed, by many hundred times, the quantity remaining on the summits of the rocks, or arrested in its upward progress by those ferruginous lodes of rarer occurrence and composition which collect the solutions in

what is called a gold mine, to be extracted thence by cost and toil; therefore, whilst gold can now be obtained with undoubted ease, and while waiting for further information from the only man living who really understands the question (and those who have despatched him to this colony have done the nation service), it may be well to consider how we can make a beneficial use of the gold already possessed, so as to divert to ourselves from this colony some of those commercial advantages which the United States are actively appropriating. We may, perhaps, discover, by intelligent examination, that we have in our power a mine of wealth at home, even without seeking in Devonshire for a miniature representation of the gold regions of the Andes, or investigating the "volcanic action" (in the neighbourhood of which action no mines of metal are found) of mole hills, or finding deposits of Swedish steel (the philosopher's stone) in Northamptonshire, sufficient to return this nation an income equal to California and Australia united. I shall propose to revert to this subject.

May 20.

DAVID MUSSET.

## STEAM ON COMMON ROADS.

Sir,—I like Mr. Motley's perseverance, and I like his motto, but though I cannot put faith in that part of his project which involves a retrogression from the railroad to the highway, I have not the least doubt that it is in the capacity of mechanics to make steam a valuable power upon common roads, in many situations where the cost of the iron way and the earth works is impracticable, and thus impart a reviving vigour to numerous turnpike trusts, languishing under irredeemable mortgages. But I venture to predict, that the late postponement of his scheme, announced in your pages, will be followed by other postponements, until he adopts the only means capable of realizing his hopes. I do not wish to discourage his plans any more than is absolutely necessary to effect their success, but one point he will assuredly admit—that a minimum weight of engine and water, and a minimum combustion of fuel are essential to that success. There is no invention by which these can be reduced so low as by Craddock's engines. A form of boiler, especially adapted to this kind of locomotives, was a part of his contributions to the Great Exhibition, which were denied to the public (a grave question, to be the subject of equally grave inquiry). This boiler, united with the other features of the engine, makes locomotion on common roads, in appropriate situations, no longer matter of the least difficulty; and I do not hesitate to assert, when Craddock's plans are adopted, Mr. Motley will succeed, but not till then. I know well how satisfactory and interesting it is to work out our own ideas, and that nothing is more difficult than to disembarass the understanding of a sense of its own competence, and lay aside the cherished notions of years. But an enlightened mind feels even a greater pleasure in acknowledging that it is outdone, and throwing itself with candour and penetration into the appreciation of a successful competitor. The radical profundity of Craddock's system leaves nothing important for any other to perform for at least half a century; and I am entirely deceived in the tone of Mr. Motley's correspondence, if he is capable of entertaining those mean and impotent jealousies which would break all things down to one level, and attempt to extinguish the greatest blessings offered to their fellow-creatures, because they are not the authors of them. The grand and crowning glory of Craddock's system will be upon the ocean: by doubling the power and speed of that great wonder of modern days—steam navigation—results will follow, which every person not lost in faulty, must appreciate as defying calculation. It will diminish by one-half the circumference of the globe, and arrest the very footsteps of time, by doubling the centuries of duration of our coal-fields. The locomotive railway will receive in the next degree its share of benefits. These two already exist; but, if a minor degree of intercourse—a wheel within a wheel of domestic traffic—remains to be created upon common roads, it will be created by Craddock's system, or not at all.

May 24.

DAVID MUSSET.

## BELGIC-AMERICAN ATLANTIC AND MISSISSIPPI RAILWAY AND EMIGRATION COMPANY.

Sir,—In the *Mining Journal* of the 15th of May there is an advertisement of this scheme, referring to the company's offices, No. 1016, Rue de l'Hôpital, Antwerp, for prospectuses and forms of application for shares. There are other references to persons, nominated as brokers and agents, in different places in England and elsewhere; but as this company is started in Belgium, because no direction could be got together for it in London, after several trials, it must be viewed as a Belgian affair. I have, therefore, ascertained that the Notarial Acts for the formation of the company are affixed publicly at Antwerp, as the law requires. On reading them carefully, I perceive that it is merely a project, dependent entirely upon Acts of Incorporation being obtained in the United States of America, upon which a "Société Anonyme," it is hoped, will be granted here. Provisionally, it is a "Société en Commandite." I know that application was made to the ministry for authority to form a "Société Anonyme," was pushed most perseveringly, and has been firmly refused; nor has any promise been made that, even in the event of Acts of Incorporation being obtained in America (in itself most improbable), such authority will be granted as a consequence. The three states of Georgia, Alabama, and Mississippi, in the United States of America, through which the projected railway is to run, have each separate and independent governors and legislatures, with not, unfrequently, clashing local interests; it would, therefore, require a very long time, thorough knowledge of the people, and great personal influence and exertion, before any such scheme could be brought to bear. As it stands at present, it is pretty much the same as if one were to take a ruler and run a straight line across the map from Brussels to Vienna for a railroad, and present it to the public with the statistics of the countries through which it would run, without having any authority from, or any communication with, the several governments of those countries. In the case before us it is worse, inasmuch as the state of Georgia has granted Acts of Incorporation to several persons for the "Georgia Railroad and Banking Company," the "Savannah and Albany Railroad Company," and others, who must be consulted, and their interests combined, before application can be made to the Legislature, which, I am informed, does not meet until the autumn of 1853. The whole scheme is so romantic, that I do not believe it was ever intended to be worked out beyond Bartholomew Lane and Chapel Court.

In the statutes care is taken to secure the money, if the public subscribe, and which shall be returned to the subscribers (less expenses) if the project cannot be carried out. Are those expenses to be estimated *pro rata* upon the 100,000 shares, or only upon the number subscribed? Who is to check them? Suppose one or more of the projectors travelling in the different states, with a competent secretary, and such appliances to book as these gentry usually have when the cost is not to come out of their own pockets, are these expenses to be considered legitimate, as well as those incurred by the owners of the property, on the possession of which the plan is based, so as to procure the titles as early as possible, and then only have divided the rest of the cake. The plan founded upon the acquisition of the lands in Irwin county, published by Richard Kelly, in 1849, was rational, business-like, and not difficult of execution, inasmuch, as the earth works for a railroad between the Ocmulgee and Flint Rivers, across the lands (70 miles), have long been made, and stand firm, according to a recent survey; about 200,000, will, however, be required to complete even that comparatively short line. He could not succeed in forming a company in London for this practical undertaking; but now, having got together some high-sounding and respectable names in a foreign country, and knowing the palate of "John Bull," and his great appetite when the money market is easy, as at present, he cooks up a dish, highly spiced, to suit him, and if he swallows it, as most likely he will, he may find out the nature of the ingredients at his leisure, and whether they tend to increase his plethora or produce atrophy. Seven hundred miles of railway, at a cost of somewhere about 2,000,000, sterling, is a pretty strong dose, but I hope it will not hurt him. How Brother Jonathan and the Southern "Niggers" will chuckle when they hear of it!

As evidence of the good feeling for the British public with which the scheme has been got up, I give you the following translation of part of a "puff" in the *Belgian paper*, the *Independence*, of the 29th of April:—"The construction and development of the railway promises to the Belgian iron foundries and manufacturing considerable demands, inasmuch, as a company, of which the chief direction is confided to Belgians, will not procure from foreigners the rails, the carriages, locomotives, &c., which will be necessary."

Thus the British public is to find the money, and the Belgians are to have the profit! If the "puff" is intended to tickle the Belgians out of their money, it is useless; they have no objection to receive and expend foreign capital in an attempt to benefit themselves and their country, but as to putting down their own for such schemes, that is quite out of the question. Our English adventurers in Belgian railroads can speak feelingly upon this subject.—*MASCARTON: Brussels, May 22.*

The Killmoe estate (late the property of Colonel Stewart) has been purchased by the eminent firm of Fox, Henderson, and Co., for 20,000 guineas.

Several exports of lead and tin have taken place from the new works at Cox-side within the last fortnight to the Cork and Dublin markets, to order. This is quite a new trade in this part of the country, the markets having hitherto been supplied by Liverpool and Bristol houses.—*Plymouth Journal.*

DIED.—At Machynlleth, aged 77, H. Williams, Esq. (father of Mrs. Cobden), for 40 years one of the most enterprising miners in the United Kingdom.

## PATENT LAW AMENDMENT.

As the Act now in the House of Commons possesses interest for many of our readers, we give the following brief summary of the bill prepared by our correspondent, Mr. Campin, the patent agent:—

Section 1 appoints the Lord Chancellor, Master of the Rolls, English and Irish Attorney-Generals, and English, Irish, and Scotch Solicitor-Generals, and the Lord Advocate of Scotland, with such other persons as the Crown may specially appoint, to be Commissioners of Patents for Inventions.

Sections 2, 3, 4, 5, 6 relate to the seal of office, appointment of examiners, &c. Section 7 provides that, in addition to the usual petition, &c., for a patent, the applicant shall deposit a provisional specification.

Section 8. These documents to be referred to a law officer (the Attorney-General, &c., being thus denominated).

Section 9. Law officer to refer provisional specification to an examiner, who, if he approves of the same, is to give a certificate, which being allowed by the law officer, and filed in the office of the Commissioners, then the protection of patent right will date from the day of application.

Section 10. The applicant may, if he likes, deposit his full specification on applying for patent.

Section 11. Any application in fraud of true inventor not to affect his rights.

Section 12. Commissioners to advertise the application.

Sections 13, 14. Upon applicant applying to complete his patent (which must be within six months from the date of application), advertisement to be made, and objections allowed to be filed. At the proper time the law officer to refer objections, &c., to examiners, who are to inquire and report to the law officer.

Section 15. If any parties are dissatisfied, appeal may be made to law officer.

Section 16. Warrant of law officer and sealing of patent.

Section 17. The Royal Prerogative saved.

Section 18. One patent for the whole United Kingdom.

Sections 19, 20, 21, 22, 23, 24. Special provisions as to sealing patents, &c.

Section 25. The prior use, or publication, of an invention in a foreign country to annul a patent, as much as if the use, or publication, had taken place in these kingdoms.

Section 27. Foreign ships to be allowed to use a British patented invention on board thereof only; provided the foreign state, to which such ships belong, allows British subjects to use inventions, patented there, on board British ships staying within the jurisdiction thereof.

Sections 28, 29, 30. As to filing of specifications, &c.

Section 31. All specifications to be printed by commissioners and sold to the public. Printed copies to be evidence. (34.)

Section 32. As to enrolments.

Section 33. Indexes of all specifications, &c., to be made and kept open to the public.

Sections 35, 36, 37, 38. As to the register and books of the Patent Office.

Sections 39, 40. As to disclaimers, confirmation of patents, &c.

Section 41. In actions for infringements and *scire facias*, particulars of objections to letters patent to be delivered before trial, &c.

Section 42. Common Law Courts rendered competent to grant injunctions.

Section 43. As to costs.

The other clauses refer to compensation to officers, &c. &c.

The schedule gives the scale of fees, &c., which are the same as in the former bills, requiring small payments in the first instance, and payments at the 3d and 7th years.

**RAILWAY STATISTICS.**—The length of railway open at the end of 1851 was 6890 miles; end of 1850, 6621 miles; and end of 1849, 6032 miles—showing an increase in mileage in 1851 over 1850 of 269 miles, and end of 1850 over 1849 of 589 miles.

**PASSENGERS.**—The number of passengers conveyed on railways in the United Kingdom for the half-year ending the 31st Dec., 1851, was 47,509,392; for the corresponding period of 1850, 41,087,919; and for the corresponding period of 1849, 35,073,672—showing an increase in the half-year ending the 31st Dec., 1851, over the corresponding period in 1850 of 6,421,473 passengers, and for the half-year ending the 31st Dec., 1850, over the corresponding period of 1849 of 6,014,747 passengers.

**ACCIDENTS.**—In the half-year ending the 31st December, the number of persons killed was 113, and 264 injured. There were 8 passengers killed and 213 injured, from causes beyond their own control; 9 passengers were killed and 14 injured, owing to their own misconduct or want of caution; 30 servants of companies or of contractors were killed and 17 injured, from causes beyond their own control; 32 servants of companies or of contractors were killed and 11 injured, owing to their own misconduct or want of caution; 53 trespassers and other persons, neither passengers nor servants of the companies, were killed and 9 injured, by crossing or walking on railways. There was one suicide.

An extraordinary general meeting of the Railway Passengers' Assurance Company was held on Tuesday, for the purpose of approving the company's bill, now before Parliament, the object of which is to obtain powers for an extension of operations in the very useful field in which the association has entered. It is proposed to issue, at the option of insurers, tickets which, upon one single payment, shall entitle the holder to compensation for the whole of his life in case of accident. Another provision of the bill is the extension of the company's operations to accidents arising from any cause whatever. The proceedings were merely formal, and the required sanction was of course given.

**MR. WILLIAM NAISH, of NEWPORT, MONMOUTHSHIRE,** INSPECTOR OF RAILS, begs most respectfully to acquaint merchants, brokers, engineers, and others connected with the British Iron Trade, that he still continues to EXECUTE ORDERS OF INSPECTION throughout the various districts of SOUTH WALES and adjacent IRON-WORKS, and confidently refers to the satisfaction which his supervision has given during the last ten years to exporters of rails to the United States and the Canada, as well as continental Europe, as a proof of the fidelity, carefulness, and promptitude of his inspections.

Mr. NAISH is efficiently assisted by his son, whose competent experience enables him to represent Mr. Naish during his occasional absence from home, so that no delay can possibly accrue to parties desirous of having their orders executed with skill and dispatch. Newport, Monmouthshire, March, 1852.

## SALE OF THE LOCOMOTIVE MANUFACTORY AT CARLSRUHE, IN THE GRAND DUCHY OF BADEN.

This manufactory is of the most complete construction, and well supplied with the necessary tools for employing 600 workmen—40 locomotives have been turned out complete in one year. It is situated near the Rhine, and adjacent to the Great Baden Railway, to which it is connected by a branch line. Its situation for obtaining the necessary products, and the sending off of the manufactured goods being most convenient.

This manufactory cost 648,262 florins.

SEALED TENDERS to be FORWARDED to the TRUSTEES of "Machine Factory, Karlsruhe," on or before the 7th June, 1852, on which day, at Ten o'clock A.M., the tenders will be opened in presence of the tenders, and arrangements will be immediately made to transfer the said property, provided the bidders are up to at least the sum of 215,000 florins.

Particulars of stock, &c., may be had on application at Karlsruhe.

## TO RAILWAY AND STEAM COMPANIES, ENGINEERS, MILLWRIGHTS, AND OTHERS.—B. COQUATRIX'S PATENT LUBRICATOR.

so highly approved of by the most eminent engineers, gives ACCURATELY any REQUIRED NUMBER OF DROPS OF OIL PER MINUTE.—To be had at A. GRANAR, 15, Leicester-square, Leicester-square, London.—Price, without the boxes, 24s. per dozen.

## STEAM-ENGINE BOILERS, of every description.

WROUGHT-IRON GIRDERS, GASOMETERS, SHIP TANKS, SUGAR AND SALT PANS, CANAL BOATS, CISTERNES, AND GENERAL WROUGHT-IRON WORK, MANUFACTURED BY MELROSE & CO., BRADLEY WORKS, near BILSTON, STAFFORDSHIRE.—Office in London, 78, Hatton Garden.

## AUSTRALIA, CALIFORNIA, &amp;c.—PARTIES proceeding

to the GOLD DIGGINGS can be SUPPLIED with MELTING POTS, CRUCIBLES, &c., of the best quality, at lowest prices, by MORGAN AND REES, Importers, Manufacturers, & Shippers, 1, CRESSNET, JEWELL-STREET, ALDERSGATE-STREET, London.

Lists forwarded on application.

## AUSTRALIAN GOLD FIELDS.—The Second Number of

the "Melbourne Circular of Intelligence for Emigrants," proposing to connect themselves with the MELBOURNE GOLD AND GENERAL MINING ASSOCIATION (Chairman, the Right Hon. the Earl of Devon), is now ready, and can be had of G. J. Yonge, 11, Charles-street, Westminster; G. Mann, 39, Cornhill; and at the offices of the Association, 9, King's Arms-yard, City.—Price 2d., or by post-free, 3d.

Just published, price 1s.,

## FREE PRODUCTION HAVING FREED TRADE!

The PRESSURE OF TAXATION EXPOSED in a LECTURE, delivered in the University of Cambridge, with an APPLICATION of the PRINCIPLES to the PRESENT CRISIS. By THOMAS BANFIELD, Esq.

Author of Six Lectures on the Organisation of Industry—Industry of the Rhine, &c. London: G. Ridgway, Piccadilly; Edinburgh: Wilson, Royal Exchange.

## PATENT SAFETY FUSE.—The GREAT EXHIBITION

PRIZE MEDAL was AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH, and DAVEY, who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE has now a thread wrought into its centre, which, being patent right, infallibly distinguishes it from all imitations, and ensures the continuity of the gunpowder.

This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.

Address.—BICKFORD, SMITH, and DAVEY, Tuckermill, Cornwall.

## STIRLING'S PATENT YELLOW METALS.—Adapted for

SHREATHING, BOLT STAVES, BOLT NAILS, DECK NAILS, as reported on by the late Mr. Owen, Supervisor of Metals to the Admiralty; also for PROPELLERS, FRAMEWORK SCREWS, PISTONS, CYLINDERS, COCKS (particularly where there is exposure to corrosion), RAILWAY CARRIAGE AXLE BEARINGS, and for all machinery subject to friction.

Messrs. JOHNSON, 166, Buchanan-street, Glasgow.

Applications for licenses and other information to be addressed to the undersigned, ALFRED BARRETT, Bishopsgate Foundry, Skinner-street.

## THE ROYAL BRITISH BANK.—on the Scottish System

(Incorporated by Charter).—besides the transaction of all ordinary BANKING BUSINESS, GRANTS CASH CREDITS, and ALLOWS THREE PER CENT. per annum on SUMS of any amount DEPOSITED for SIX MONTHS.

HUGH INNES CAMERON, General Manager.

London: HEAD OFFICE, 16, Tokenhouse-yard; BRANCHES, 439, Strand, 77, Bridge-street, Lambeth, and 97, Goswell-road, Islington.

## GOLD QUARTZ.—To TRUSTEES and CURATORS of

THE MUSEUMS, and those interested in GEOLOGICAL COLLECTIONS, and DEALERS IN GOLD GENERALLY.

THE DIRECTORS of the CARSONS CREEK CONSOLIDATED MINING COMPANY hereby give Notice, that they are prepared to RECEIVE PROPOSALS for the PURCHASE of the SPECIMEN OF GOLD QUARTZ raised from Carson's Creek Mine, and exhibited at the Crystal Palace in 1851. It is believed to be the richest piece of Gold Ore existing in the world, and is certainly the finest ever brought into this country.

Its weight is 103 lbs. 11 ozs. 15 dwt. 5 grs. As it is impossible, without breaking it up, to form more than a proximate judgment of its mercurial value, the directors submit a statement of the proceeds received by them of four small specimens of ore from the same mine, which were reduced by two different processes—two of the pieces have been smelted, through Messrs. Rothschild, by Messrs. Poissard and Co., in Paris, and the other two in Wales, through Messrs. Clay and Gilman.

Before proceeding to crush this beautiful specimen, the Directors desire to ascertain if an adequate price cannot be obtained for it on behalf of one of the Geological Museums or Collections of the country.

It has long been a received doctrine among geologists, that gold was only to be found in the detritus on the surfaces of the earth: this theory has been overturned by the working of the mine from which this specimen was obtained, at a depth from the surface of 83 feet, and which shows, in the angularity of its edges, that it formed part of a vein of similar rock—a circumstance which considerably enhances its interest.

Parties desirous of proposing for the purchase are requested to address the Secretary, by letter, at the offices of the Company, on or before the 15th day of June next, until when (unless previously disposed of) the specimen may be viewed at the offices, between the hours of One and Four. By order of the board, H. NESBITT, Sec.

Allhallows Chambers, Lombard-street, May 28, 1852.

Gross weight.		Nett produce of Gold.		Per cent.		Nett produce of cash rec.		Gross value per ton.	
oz.	dwt. gr.	oz.	dwt. gr.	oz.	dwt. gr.	£	s. d.	£	s. d.
No. 1.	44 18 5	30 14 17	46	50	117	9	0	48,068	0 0
No. 2.	60 17 3	30 13 8	50	50	117	9	0	52,248	0 0
No. 3.	19 13 8	12 16 12	65	48	4	4	0	67,922	0 0
No. 4.	78 0 21	53 6 18	68	203	0	7	0	71,048	0 0

## OLD BRIMPTON MINING COMPANY.—At a SPECIAL

GENERAL MEETING of the above Company, held in the offices of Mr. Thomas Fuller, 51, Threadneedle street, London, on the 26th May, 1852.

W. H. PITT, Esq., in the chair.

The notice calling the meeting having been read, it was—

Moved by Mr. Upton; seconded by Mr. Wills.—

That in the present state of the finances of the Mine, a large number of shareholders not having paid their calls, it is deemed advisable to suspend the working of the Mine.

Moved by Mr. John Hart; seconded by Mr. Wills.—

That the plant on the mine be offered for sale in London by public auction, and that notice of the said sale be published in the *Mining Journal* on the two following Saturdays—viz., the 29th of May and the 5th of June next.

Moved by Mr. John Symons; seconded by Mr. Browne.—

That notice be given to all defaulters, that steps will be taken immediately to enforce their calls.

Resolved.—That a Committee be appointed from the present Company—viz., Messrs. Wills, William Browne, Henry Browne, J. Symons, C. Cawley, J. Debnam, W. W. Pitt, H. M. Upton, and that three do form a quorum, to assist the pursuer in winding-up the affairs of the Mine.

The question being put to the captain, whether he would resign his situation at the end of the month, he resigned accordingly.

Moved by Mr. Wills; seconded by Mr. Browne.—

That the best thanks of this meeting be given to the Chairman, for his valuable services on this occasion.

WILLIAM W. PITT, Chairman.

## PRINCE ALBERT CONSOLS MINE.—At a MEETING of

adventurers in this Company, held at the office, No. 2, Winchester-buildings, London, on Friday, the 28th day of May, 1852.

CHESTER CHESTON, Esq., in the chair.

The notice convening the meeting was read by the secretary. The minutes of the last general meeting, and of the adjourned general meeting, were read and confirmed.

The financial statement was read and passed, and there appears to be a balance at the bankers of £302 2s. 9d.

Resolved.—That William Goslett, Robert Mc Dougal, S. Ring Church, Chester Cheston, and William Holgate, be appointed the finance committee for the next two months.

The thanks of this meeting were unanimously voted to Captain Davies for his unremitting exertions in promoting the interest of the adventurers, and for skilful operations on the mine.

CHESTER CHESTON, Chairman.

## WHEEL SAVILE.—(Divided into 4096 shares).—

CONDUCTED ON THE COST-BOOK PRINCIPLE.

1048 shares will be issued to the public at 3s. per share, and the same to be put into the bank for the future working of the mine.—Does one-sixteenth.

COMMITTEE.—Mr. G. Lacey, Mr. H. Drew, Mr. Philip, and Mr. Newton.

BANKERS.—National Provincial Bank of England, at Okehampton.

PURSER.—Mr. Charles Seymour, Okehampton.

MANAGING AGENT.—Captain James Phillips, Bristol.

This mine is very extensive, and situated at Okehampton, in beautiful hills, near the junction of the granite range of the Dartmoor Hills.

The present workings are going on from the West River, on the course of an east and west lode, 6 feet wide, underlies north at an angle of about 35°, and presents well-defined walls; the ground can be driven for about 21 feet per fathom, and by driving in this direction until under the summit of the hill, there will be a back 80 fathoms high.

The lode is composed of sugary spar, prisms, fookan, peach, and mundic, stained with copper ore. There are five promising lodes already discovered in this set—three copper and two silver-lead—all traversing through a congealment matrix for large deposits of copper and lead ore. About 40 fathoms north of this there has been a shaft sunk on the course of an east and west lode, about 2 fathoms below the river, 8 feet wide, and producing a great deal of crystalline ore; and in another place on this lode, very near the shaft, they have sunk 6 ft., and broken stones of yellow copper ore, that would make, there is no question, a produce of 30, and it is believed, by sinking on those lodes 20 fathoms, they would produce ore enough to leave a dividend.

A never-failing stream of water is accessible for working any machinery that may be required, and for dressing the ores: 2048 shares, at 3s. per share, is £512, will be quite sufficient to carry on the work efficiently for the next 12 months.

Specimens of the lodes may be seen at Mr. Seymour's office, Okehampton; or at Capt. Phillips's, Bristol, where every information may be obtained, and applications for shares and prospectuses will be received.

## WHEEL GEORGE.—In the parish of ST. KEW, CORNWALL.

ON THE COST-BOOK PRINCIPLE.

Capital £2048—in 1024 shares, of £2 each.

PURSER (pro tem).—William Pease, Esq.

MANAGER.—Captain John Dale, of St. Stephen.

This set, which is very extensive, is situated in the parish of St. Kew, within three miles of Port Isaac and Port Gaveren, and six miles of Wadebridge, three good shipping places. A deep adit can be brought into the mine, and several lodes intersected at a very trifling expense. Seven lodes have been discovered, one of which, on the hill ground, and within a depth of 21 feet from the surface, is 4 feet wide, and has 2 feet wide of very rich antimony—rocks of which are to be seen on the spot. Other lodes have been discovered near the surface, presenting fine lead gossan, and from which very rich silver-lead ore has been broken, and is to be seen at the surface. The stratum is clay slate, of a strongly mineralised character.

The set has been secured from the lord for a term of 21 years, at 1-15th dues. It is the opinion of eminent geologists, as well as that of experienced miners, that a better speculation, or one more worthy the notice of capitalists, has not, for a long time, been offered to the public.

As a great deal of work has been done, and the present proprietors have had to make a considerable outlay to secure the set, £1 per share will have to be paid to them out of the call of £2 per share, now proposed to be made, and

## Encumbered Estates Court, Ireland.

## THE AUDLEY ESTATES, COUNTY OF CORK.

In the Matter of the Estate of the Right Honourable GEORGE EDWARD LORD BARON AUDLEY, Owner.

By order of the Court, the following ESTATES, which comprise TWENTY-SIX TOWNSHIPS, containing in the whole 5675 statute acres, situate in the Parishes of EAST and WEST CARRERY, in the West Riding of the county CORK, together with the IMPROPRIATE TITHES RENT-CHARGE of the parishes of AFFADOWN KILCOE and CAPE CLEAR; also of the THREE PARISHES of KILKATERAN, KILLOCANENAGH, and KILMANAGH, forming the Union of Bantry, situate in the West Riding of CORK.

The several denominations of land, and the improper tithes rent-charge, the subject of the sale, were demised in the year 1755 by James Earl of Castlehaven and Baron Audley to Mr. William Hall, for the term of 99 years, of which term there is one year and a half to run from November next, and the several lots will be sold, subject to the residue of that term.

The rent reserved by said lease of 1755 being £535 7s. 6d., present currency, has been apportioned amongst the several lots of land, and each purchaser will be entitled to receive such portion thereof during the term of said term, as is stated in the particulars of his lot.

THE MINES OF COPPER and other MINERAL PRODUCTS of the ESTATES, which are deemed very valuable, will be sold separately from the lands. Mr. Henry English, mining engineer, has recently inspected these mines, by order of the Commissioners, and his report will be found attached to the rental.

For rentals and further particulars apply at the Office of the Commissioners, No. 14 Henrietta-street; or to Sir Matthew Barrington, Bart., Son, and Jeffers, solicitors, having charge of the sale, No. 10, Ely-place; Richard Scott, Esq., solicitor for Lord Audley, 16, Middle Garden-street; and Messrs. White and Fry, 13, Lower Mount-street, Dublin; and to Messrs. Young and Jacksons, 12, Essex-street, Strand, London.

## Encumbered Estates Court, Ireland.

## EXTENSIVE AND VALUABLE MINERAL PROPERTY.

## THE ENTIRE OF THE ROYALTIES OF THE ESTATE OF LORD AUDLEY, in the county of CORK.

WILL BE SOLD on Tuesday, the 23d day of June next, in One Lot. The Estate extends over 5675 acres, which has been for many years the subject of Chancery litigation, is now available for profitable enterprise, and immediate possession can be had; it abounds in COPPER and other valuable MINERALS, of great richness, of which many thousands tons have been raised. Shafter have been sunk, adds driven, substantial and serviceable surface buildings erected, with its proximity to the sea, and lying in the midst of an industrious and orderly population, where labour is cheap and outcrops unknown, render this property, as a whole, one of the most valuable of the kind—holding out every advantage for the profitable investment of capital.

It has been subjected to the surveys of eminent mining engineers, whose reports can be referred to.

Further particulars can be obtained on application to Sir Matthew Barrington, Bart., Son, and Jeffers, solicitors, Dublin; to Peter Brophy, Esq., 19, South Parade, St. James's Park, London, the lessee (in trust) of the property; or to Thomas Baker, Esq., No. 29, Spring Gardens, Charing-cross, London.

## Encumbered Estates Court, Ireland.

## THE FEE-SIMPLE TRUST ESTATES OF THE EARL OF SHANNON.

These PROPERTIES WILL BE SOLD on the 13th day of July, 1852:— SHANNON PARK—lying about six miles from the city of Cork, containing 228 acres, producing £282 17s. 6d. yearly.

CORK HARBOUR ESTATE—lies close to the entrance of the Cork Harbour, and contains 3256 statute acres, in a ring fence, and produces £2180 yearly. A valuable silver-lead mine has been opened on this property, and very good specimens of coal have been found within a few feet of the surface.

THE CHARLEVILLE ESTATE—contains 503 statute acres, likewise in a ring fence, and produces £474 17s. 10d. yearly. This property lies within one mile of the town of Charleville, a station of the Great Southern and Western Railway.

THE RANDON ESTATE—contains 1065 statute acres, in the immediate vicinity of the town of Bandon, also a considerable portion of the town. The property produces £1831 4s. 4d. yearly.

THE YOUGHALL PROPERTY—consists of ground rents, amounting to £31 19s. 1d. yearly.

THE WATERFORD ESTATE—contains 1455 statute acres, in a ring fence, and produces £510 16s. 11d. yearly. It lies close to the town of Tallo, which is on the River Bride.

THE IMPROPRIATE RENT CHARGES, in lieu of Tithes, issuing out of four parishes, and producing yearly £431 14s. 1d.

THE ADVOWSON OF CARRIGALINE—the net annual income of which is £210, and the right of presentation to the perpetual curacies of Tracton and Ballinaboy. The curacy of Tracton produces an income of £71 2s. 10d., and that of Ballinaboy an income of £59 4s. 7d. yearly.

For rentals and further particulars apply to Messrs. Walford, solicitors, No. 27, Bolton Street, Piccadilly; to George P. White, C.E., 18, Adam-street, Adelphi, London; and to Murdoch Green, 1, Doler-street, Dublin, the solicitor having the carriage of the sale.

## FOR SALE.—TIN AND COPPER MINES IN CORNWALL.

—TO BE SOLD, about TWO-THIRD PARTS OF THE SHARES IN TWO VALUABLE TIN AND COPPER MINES, on very advantageous terms to purchasers, who would appoint all the officers of each company. The other ONE-THIRD OF THE SHARES would be RETAINED by the present Cornish proprietors.

THE MINE, No. 1, lies in one of the granite districts of Cornwall, and by the additional outlay of about 20s. per 1024th share, to be applied to the erection of stamping machinery, will, in the judgment of an intelligent and experienced mine agent, who carefully inspected the mines and prepared estimates of the requisite expenditure, and of the monthly costs and returns, yield the steady monthly profit of 5 per cent. on the past and required outlay, or 60 per cent. per annum, from what he describes as the almost "inexhaustible" supply of mineral already discovered above the deep adit level.

THE MINE, No. 2, is in kyllas, with elvan courses, near the junction with granite, and nearly adjoining the Mine, No. 1. Here a productive tin lode has been cut, and opened on at a 20 ft. level, which may be at once worked at a profit. A few weeks working would also cut, at that level, a copper lode, which produced at a shallow level rich yellow copper, and both lodes can be worked to a considerable depth, and the ores dressed with water power, of which the supply is unfailing.

From both mines very large quantities of mineral have been raised at a distant period from superficial or surface operations. The shares are now in few hands, but losses in other transactions alone induce the owners to lessen their interest, and parties forming companies to work *bona fide* Cornish mines, will benefit by turning their attention to the present offer.

For further particulars, reports, and information, as well as for orders to inspect the mines, application is requested to be made to Mr. Richard Greenwood, sharebroker, &c., Truro, who will negotiate the terms of sale.—Dated Truro, May 26, 1852.

## FOR SALE, BY PRIVATE TREATY, THREE-FOURTHS OF THE VICTORIA AND ALBERT COAL MINES, and other PROPERTY connected therewith, situate in RAINFORD and UPHOLLAND, within 11 and 12 miles respectively of the Stanley Dock, Liverpool, on the Lancashire and Yorkshire Railway.

These mines are the most compact properties of the kind, and are now opened up to an extent of being capable of producing from 250 to 300 tons of coals per day; and the distance from the market is easily accomplished in about half an hour. The Railway Company's Charter provides that the rate per ton per mile shall not exceed one penny; and railway companies may be bargained with in a liberal way when they are satisfied that such facilities will largely increase their revenue.

On the VICTORIA PROPERTY are two pits or shafts sunk, 9 feet diameter or thereabouts, clear of the brick, and about 75 and 60 yards deep respectively, with engines, engine-houses, blacksmith and joiners' shops, coal office, lumber shop and stables, head gear, flat ropes, conducting rods, baskets, trams, and tram rails, weighing machine for 5 tons, and about 700 yards of railway to both pits or shafts, with crossings, fenced in, all complete to the Company's line.

The ALBERT COLLIERY is situate in the very centre of the mines of the Earl of Crawford and Balcarres, in Upholland, with railroad through the Right Hon. the Earl of Derby's property, and has one main shaft on the deep, 9 feet diameter clear of the bricks, or thereabouts, and about 47 yards deep, besides a crop or air-shaft, with engine, engine-house, head gear, conducting rods, flat ropes, baskets, trams, and tram rails, four brick dwelling-houses and blacksmith's shop, a large wooden house, 48 feet by 24 feet, containing an office, workshop, and lumber shop, and about 1250 yards of railway of heavy rails, including a long siding and crossing at the Company's line.

The properties, together, contain upwards of 100 statute acres, with many valuable mines underneath them, now worked at a sufficient, it is supposed, to produce some millions of tons of coal. The leases are for 30 years and 50 years respectively.

In connection with these mines are 40 double hopper waggons, to carry at one run about 250 tons of coals, and are so constructed as to be lowered over the railway arches into the carts direct, without the use of spade or shovel. To do this, two lowering machines have been erected at State-street, Stanley Dock, by which about one ton per minute may be thus conveyed by the labour of three men, at ordinary wages, into the carts or trucks. Also a good locomotive engine, for bringing the waggons to and from the mines. The property is in active working continually, and intending purchasers are invited to inspect the works and other properties named.

The liabilities may be considered at an end, unless for the deepening of the present shafts, or sinking others on the crop or other mines; among which, are said to be the three-foot smithy, the five feet and four feet Orrell, in one of the mines; and in the other is said to be the greater number of the St. Helen's mines, including the Rusby Park and Little Delf.

The Lancashire and Yorkshire and East Lancashire Railway Companies have decided, and the Liverpool Dock Committee have also agreed, that a line of railway is to enter the docks, to be commenced by the railway companies at an early day, whereby coals can be dropped, by the peculiarity of these waggons, not upon the docks of vessels, but down on the keels, by the hopper boxes being lowered, and thus save all expenses, and afford increased facility for the shipment of coals.

The above works are only recently completed, and consequently are all but new, and in the best order. Good reason will be given for the disposal of the same; and should it be desired by intending purchasers to have the remaining quarter, this can also be arranged. The works will be continued on, as heretofore, in full operation, and a large connection has been formed for the time the coals have been introduced, and none can bring them to market on better terms.

The mines now worked are well approved of for house, steam, and shipping purposes. For further particulars apply to the proprietors, A. F. and D. Mackay and Co., No. 1, Rinford-place, Liverpool.

## GAS WORKS TO LET.—Notice is hereby given, that the DIRECTORS of the BICESTER GAS, COKE, and COAL COMPANY will be ready, on or before Tuesday, the 15th day of June, 1852, at six o'clock in the afternoon, to RECEIVE TENDERS, sealed up, from such persons as may be desirous of HENTING the WORKS of the Company, situate at BICESTER, OXON, for the term of seven years, from the 1st of July, 1852, determinable at the end of three or five.

The tenders are to be endorsed, "Tender for the Bicester Gas Works," and forwarded to the Secretary, at Bicester, at any time before six o'clock in the afternoon of the 15th day of June aforesaid, to whom all applications to view, and for particulars, are to be made.—Dated the 17th day of May, 1852.

GEO. HARRIS, Secretary.

## CANALIZATION OF THE EBRO.

Capital £1,200,000 (Ron. 120,000,000), in 60,000 shares, of £21 6s. 8d. Nominal (Ron. 2000), issued at £16, with a guarantee of the Spanish Government of 6 per cent. per annum upon the nominal amount, equal to 8 per cent. upon the real capital.

Deposit £4 per share—40,000 shares are already subscribed in Spain and in France.

DIRECTORS IN PARIS.

MM. J. DE GRIMALDI, JAYR, ancien Ministre, PRINCE DE MONTLEART, COMTE DE MORNAY, ancien Ministre.

TRUSTEES IN LONDON. BEAUMONT HANKEY, Esq., CHARLES DEVAUX, Esq.

Eleven Spanish Directors to be appointed out of the list of subscribers in Spain, which includes persons of the highest distinction.

The Board will be composed of 21 directors, three of whom will be English (elected by the English shareholders), who will appoint a managing committee of five members—three Spanish, one English, and one French.

BANKERS. Messrs. Roberts, Curtis, and Co. London. P. GIL and Co. Paris. Donon, Aubry, Gautier, and Co. Lyons. Tria, Geron, and Co. Bordeaux. Girou, Caze, and Co. Saragosa. Tomas Castellanos and Co. Madrid.

AGENTS IN LONDON.—Messrs. C. Devaux and Co.

After the most careful calculation of receipts and expenses by competent parties, it is estimated that the profits of this concern will not be less than 30 per cent.

Applications for shares and prospectuses to be made to Messrs. J. Hutchinson & Sons, Lombard-street; or T. Uzeli, 75, Old Broad-street.

## DUIN WATER MAATSCHAPPY—(AMSTERDAM HILL WATER COMPANY).

Third call of 36 guilders, or £3 sterling per share.

Notice is hereby given, that the Board of Directors of this Company, with the assent of the Board of Commissioners, has made a CALL of THIRTY-SIX GUILDERS, or £3 sterling, per share on all the shares of this Company, PAYABLE at the Associate Cassa, in Amsterdam; or at Messrs. Masterman and Co., in London, on or before the 12th day of June next.

By order of the Board of Directors. J. VAN LENNEP, Chairman.

Amsterdam, May 7, 1852. (Countersigned) JOHN HOWARD, Secretary of the Board of Commissioners in London.

## DUIN WATER MAATSCHAPPY—(AMSTERDAM HILL WATER COMPANY).

At the ANNUAL GENERAL MEETING of the shareholders in this Company, held at the Offices, in Amsterdam, on Wednesday, the 19th day of May, 1852, JACOB VAN LENNEP, Esq., LL.D., in the chair,

the following Resolutions were passed unanimously:—

1. That the report of the directors, and the balance-sheet, ending 31st December, 1851, be adopted.

2. That Leo Schuster, Esq., of Penge Park, Surrey, Director of the London and Brighton Railway, be elected Commissary, in the room of Thomas Moxon, Esq., resigned.

3. That the thanks of the meeting be given to Jacob Van Lennepe, Esq., for his able conduct in the chair.

## WEST GRANADA OR VERAGUAS GOLD AND SILVER MINING COMPANY.

CHAIRMAN. GEORGE THOMAS BRAINE, Esq., 8, Hyde-park-terrace.

FREDERICK MILDRED, Esq., Nicholas-lane. GEORGE CLIVE, Esq., 20, Eaton-square.

BANKERS.—Messrs. Masterman, Peters, and Co.; the Commercial Bank of London. BROKERS.—Messrs. Hichens and Harrison, 18, Threadneedle-street.

SOLICITORS.—Messrs. Baker, Ruck, and Jennings, 34, Lime-street.

The unquestionable character of the title to these mines—the exemption from royalty and dues, the short distance from England—the proximity to the Atlantic coast, the quantity (17,000 tons) and quality of the ore at surface, valued at £189,000, extracted from the hill above adit level—the prospect of speedy returns from this source—the great extent of the veins, and their progressive increase in richness in proportion to the depth, according to the tests made—afford ample ground for expectation that the dividends of the company will equal those of the richest gold and silver mines now known, and that the provisional contract entered into by the directors will, upon the verification of the report, have secured to the shareholders the possession, in perpetuity, of a property of great and increasing value.

The special attention of the public is directed to the fact, that shareholders will be entitled, if the directors, upon the receipt of the report, shall determine to proceed no further, to have returned back the original 20s.—less the actual expenses, not exceeding 2s. per share.

Applications for shares may be made to the directors, at the offices of the company, 1, Royal Exchange-buildings; and Messrs. Hichens and Harrison, stockbrokers, Threadneedle-street.—For further particulars see prospectus.

## WEST GRANADA OR VERAGUAS GOLD AND SILVER MINING COMPANY.—Notice is hereby given, that NO APPLICATIONS FOR SHARES in this COMPANY can be RECEIVED after MONDAY, the 31st May inst.

By order, WILLIAM WEBB, Secretary.

## THE MINERS' OWN GOLD COMPANY.—VICTORIA, AUSTRALIA.—In 20,000 parts, or shares, of £1 each.

COMMITTEE OF MANAGEMENT. EDWARD E. ALLEN, Esq., Steel-yard, Upper Thames-street.

THOMAS HAWKINS, Esq., Norland-square, Notting-hill. JOHN AVERY, Esq., Cloudsley-square, Islington.

JOHN JONES, Esq., Norland-square, Notting-hill. H. W. TAYLOR, Esq., F.G.S., Winterton-place, Vassal-road.

BANKERS.—Messrs. Strahan, Paul, and Bates, 217, Strand. P. SOMERSET, Esq., J. Baylis, Esq., Red Cross-street.

OFFICES.—No. 25, BUCKLESBURY, MANSON HOUSE.

This Company unites in the strongest bonds of interest the miner with the shareholder. A holder of 100 shares may nominate any young man as a miner, who will have a free passage, and be found in provisions at the mines, whilst the shareholder and nominee will each receive 25 per cent. of the net profits.

Thousands of wealthy men in this country have friends and relatives to whom a lift to Australia at this time would prove a fortune, whilst they themselves might sit at home and participate in the profits—thus combining their own interest with an act of good service to their friends or kindred.

Young men taking 50 shares, and working as miners, to have the same privileges, and 50 per cent. of the net profits.

Applications for shares or prospectuses to be made to WILLIAM JONES, Pursuer.

## AUSTRALIA.—DEVON AND CORNWALL MINERS' GOLD COMPANY.

Capital £50,000, in £1 shares, paid-up.—No further call or liability. ON THE COST-BOOK SYSTEM.

DIRECTORS. SAMUEL WEATHERLEY, Esq., St. James's-place, New Cross, Chairman.

JAMES LANG, Esq., M.D., Chichester-place, Exeter. P. SOMERSET, Esq., J. Baylis, Esq., Red Cross-street.

W. G. GARD, Esq., (Devon Great Consolidated Mines), Tavistock. Captain JAMES PEACHEY LANGLEY, Mornington-crescent.

JAMES CARTHEW, Esq., Calestock, Cornwall. JOSEPH EDGE OMBE, Esq., Tavistock.

(With power to add to their number.) BANKERS. Messrs. Barclay, Bevan, and Co., London; the Devon and Cornwall Bank, Tavistock; the Union Bank of Australia, Sydney.

SOLICITOR AND SECRETARY.—James Ives, Esq. OFFICES.—11, CLEMENT'S-LANE, LOMBARD-STREET.

The extraordinary discoveries of gold in the districts of Bathurst, Brisbane, Moreton Bay, the Hunter, Clarence, and Crookwell Rivers, led to the formation of this Company by a union of interests with the miners of the West of England—so that under their practical experience some of the mineral riches of Australia might be developed.

With a view of affording full scope to the accomplishment of these desirable results, the Company has purchased, under an indispensible title, a Government grant of 797 acres of freehold land, bounded on two sides by the Crookwell River, and in the very centre of the auriferous district of Bathurst, being situated about midway between the town and the lake bearing that name. This part of Australia is known to be auriferous to a great extent—an assertion further strengthened by repeated notices in the Sydney journals, and fully verified by private advices; from which it is ascertained that mining operations are now progressing to a considerable extent in the several districts approaching the locality of the Company's property.

Mr. W. G. GARD (who is now, and has been for the last seven years, in the employ of the Devon Great Consolidated Mining Company, and previous to that period spent several years in Australia) has been appointed General Manager, to select an able staff and the requisite machinery for the objects the Company, and will repair to Australia so soon as his present engagements will permit. In the interim, however, Capt. James Peachey Langley has been dispatched, per *Gipsy Queen*, to take surveys, report on the land, and forward all preliminary arrangements. The well-known experience, energy, and integrity of Mr. Gard must be a sufficient guarantee that every exertion will be used to render the explorations of the Company beneficial to the shareholders; and the Directors have much pleasure in referring to the nature of the engagement made with that gentleman, inasmuch as it not only evidences the soundness of the Company's proceedings, but is a test of the practicability of its operations. Mr. Gard having consented to the appointment at a moderate salary, combining a reciprocal interest by a per centage on the returns secured for the Company, thus stimulating his enterprise, to as to secure the development of the mineral resources of the district in the most speedy, efficient, and practical manner.

Application for the remaining shares may be made in the usual form to any of the following brokers, or to the Secretary, at the offices of the Company, 11, Clement's-lane, Lombard-street:—Messrs. Sims and Hill, Stock Exchange, London; George Baker, Esq., Stock Exchange, Liverpool; John Clark, Esq., Southampton; Charles S. Edsall, Esq., Truro, Cornwall; Messrs. T. W. Flint and Co., sharebrokers, Hull; T. Sandford, Esq., Exeter; Frederick Olding, Esq., sharebroker, Brighton; G. J. Phillips, Esq., Camborne, Cornwall; J. Sims, Esq., Calestock; J. Sergeant, Esq., Linton, Cambridgeshire; J. K. Thomas, Esq., sharebroker, Bristol.—London, April, 1852.

## THE MELBOURNE GOLD AND GENERAL MINING ASSOCIATION.—In consequence of the daily increasing rates of freight and charter, Emigrants proposing to become Tributaries in this Association are informed, that the PRICES FOR PASSAGE, as stated in the "Melbourne Circular," CAN NO LONGER BE RETAINED, but that the most moderate rates of approved Emigrant lines will be adopted.

The Committee propose to secure berths by the best ships for those who wish to proceed at intermediate dates between the regular departures.

The list is still open for applications for departure about the 15th of June and July; and parties proceeding as Tributaries are recommended to embark at these dates, as arrangements are made for their reception, which cannot be guaranteed by those leaving separately. Birkenhead is appointed the most central port of departure, and to avoid the delays of the Channel navigation.—London, May 26, 1852.

## STEAM TO INDIA, CHINA, &amp;c.—Particulars of the regular MONTHLY MAIL STEAM CONVEYANCE.

AND OF THE ADDITIONAL LINES OF COMMUNICATION, NOW ESTABLISHED BY THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY with the EAST, &c. &c. The Company book PASSENGERS, and receive GOODS and PARCELS, as heretofore, for CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG KONG, by their steamers, starting from SOUTHAMPTON on the 20th of every month, and from SUEZ on or about the 5th of the month.

The next extra steamer will be dispatched from Southampton for Alexandria, on the 3d October next, in combination with an extra steamer, to leave Calcutta on or about the 20th of Sept. Passengers may be booked, and goods and parcels forwarded by these extra steamers to or from SOUTHAMPTON, ALEXANDRIA, ADEN, CEYLON, MADRAS, and CALCUTTA.

BOMBAY.—The Company will book passengers throughout from SOUTHAMPTON to BOMBAY by their steamers leaving England on the 20th of July, and of alternate months thereafter—such passengers being conveyed from ADEN to BOMBAY by their steamers appointed to leave BOMBAY on the 14th of July, and of alternate months thereafter, and affording, in connection with the steamers leaving CALCUTTA on the 3d of July, and of alternate months thereafter, direct conveyance for passengers, parcels, and goods from BOMBAY and WESTERN INDIA.

Passengers for Bombay can also proceed by this Company's steamers of the 29th of the month to Malta, thence to Alexandria, by Her Majesty's steamers, and from Suez by the Honourable East India Company's steamers.

MEDITERRANEAN.—MALTA: On the 20th and 29th of every month.—CONSTANTINOPLE: On the 29th of the month.—ALEXANDRIA: On the 30th of the month.—(The rates of passage-money on these lines have been materially reduced.)

SPAIN AND PORTUGAL.—Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, on the 7th, 17th, and 27th of the month.

N.B.—The steam-ships of the Company now ply direct between Calcutta, Penang, Singapore, and Hong Kong, and between Hong Kong and Shanghai.

For further information and tariffs of the Company's recently revised and reduced rates of passage money and freight, and for plans of the vessels, and to secure passages, &c., apply at the company's offices, No. 122, Leadenhall-street, London; and Oriental-place, Southampton.

## THE WASHINGTON CHEMICAL COMPANY, NEWCASTLE-ON-TYNE.—MANUFACTURERS OF PATINSON'S OXICHLORIDE OF LEAD.

THE WASHINGTON CHEMICAL COMPANY having, during the last year, established a MANUFACTORY OF PATINSON'S OXICHLORIDE OF LEAD, on a large scale, and being able to supply it with regularity, and to execute orders without delay, now proceed to bring this new and valuable preparation of lead before their friends and the public, quite sure that it will not, in the present age, be condemned because it is new; and that, if judged by its merits, it must make its way, and finally take its place as one of the important manufactures of this country.

Important as the Oxichloride of Lead is as a chemical combination of one equivalent of chloride of lead, and one equivalent of oxide of lead—it being well-known that common white lead is a chemical combination of one equivalent of oxide of lead, and one equivalent (or thereabouts) of carbonic acid, constituting what is called in chemical language, carbonate of lead.

Now, there is no reason to conclude that carbonate of lead is the only compound of lead valuable as a paint, and still less that it should be the best compound of lead for that purpose. In point of fact, it is not so, for the newly-discovered Oxichloride, in most, if not in all, respects is far superior; its colour is brilliantly white, and in a number of cases it has been tried against the best white lead that could be obtained; and after a period of upwards of two years it has been found to retain its white colour considerably better than the lead against which it was tried.

But the chief, and by far the most important, advantage it possesses, is its remarkable and very decided superiority of body—by which term the power of covering surface well and extensively is understood among painters. The attention of the discoverer was at a very early period drawn to this circumstance, and since that time the Washington Chemical Company have had abundant opportunities of placing its superiority, in this important particular, beyond all doubt. They have themselves performed a number of experiments, and have also caused a number of experiments to be performed, in the large way, by various practical men, to ascertain accurately its covering power as compared with the best white lead; and they now state the proportions to be as SIXTY TO ONE HUNDRED—THAT is, 60 LBS. OF OXICHLORIDE PAINT WILL COVER AS MUCH SURFACE AS 100 LBS. OF THE BEST WHITE LEAD.

—The saving of cost being in the same proportion; besides this, the coating is thicker and more protective, both in and out of doors, as the Oxichloride dries into a hard, tenacious layer, more like an enamel than paint.

In using the Oxichloride, no difference in the materials with which it is mixed is required—oil and turpentine being employed as usual both for work technically called *flating*, and for work intended to be varnished.

For the use of paper-stainers and leather dressers the Oxichloride is found to be peculiarly suitable.

The Washington Chemical Company strongly recommend this newly discovered substance to the notice of consumers, both on account of its economy and its intrinsic good qualities as a paint.

OFFICE IN LONDON (Mr. RICHARD COOKE), No. 7, SISE-LANE. Office of the Washington Chemical Company, 73, Grey-street, Newcastle-on-Tyne, Jan. 1, 1852.

## ASSAY OFFICE AND LABORATORY, 23, HAWLEY ROAD, KENTISH TOWN.—conducted by Mr. MITCHELL, F.C.S., author of "Manual of Practical Assaying," &amp;c.—Mr. MITCHELL begs to inform the Mining and Manufacturing Public, and Bullion and Metal Brokers generally, that he continues to conduct ASSAYS and ANALYSES OF MINERALS, METALS, SOILS, FURNACE and all other MANUFACTURING PRODUCTS.—ADVICE TO PATENTEES and MANUFACTURERS on all MATTERS involving a knowledge of Chemistry.

INSTRUCTIONS, as usual, in ASSAYING, ANALYSIS, and METALLURGICAL and MANUFACTURING CHEMISTRY.—23, Hawley-road, Kentish Town.

## TO MINING COMPANIES, AND OTHERS.—MR. KNIGHT offers his SERVICES as a SHORT HAND WRITER, to report Law Proceedings, Arbitration, Meetings, &amp;c., upon moderate terms. By means of an efficient staff, Mr. Knight can promise more than ordinary dispatch. A whole day's proceedings prepared for the Press, or Law Stationer, in a few hours.—118, Chancery-lane.

## ED. J. DENT has REMOVED from 82 to 61, STRAND (being 21 doors nearer to Charing-cross, and directly opposite Bedford-street), and solicits an INSPECTION of his extensive STOCK of CHRONOMETERS, WATCHES, and CLOCKS, as above; also at No. 33, COCKSPUR-STREET, and No. 34, ROYAL EXCHANGE (Clock Tower area).

## GREGORY'S HOTEL, 29, CHEAPSIDE, LONDON.—Bed, 1s. 6d.; Breakfast, 1s. 6d.; Servants, 9d. per day. Omnibuses to and from all the Railway Stations set down at the door.—Gentlemen connected with the MINING INTEREST are particularly invited to patronise this Hotel.

WELLINGTON GREGORY, Proprietor.

## NOTICE TO THE CONSUMERS OF LG&amp;CO'S PATENT IRON.

MESSRS. JOS. SYKES & SONS, SOLE CONTRACTORS for, and ONLY IMPORTERS of, these DESCRIPTIONS OF STEEL IRON, being determined to adopt every practical expedient to PROTECT the FAIR TRADER in, and CONSUMER of, these SEVERAL MARKS.

HEREBY GIVE THIS PUBLIC NOTICE, That, from the 31st March, 1852, NO IRON of the ABOVE MARKS has

## THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Last Price.	Present Price.	Dividends per Share Declared.	Last Paid.
5120	Alfred Consols (copper), Phillack	£3	14	14	2 0 to May 1852	£0 16 0 May, 1852
1848	Ally-Crib (silver-lead), Talyllyn, Wales	—	3	3	0 7 6 to Oct. 1851	0 5 0 Jan., 1851
2000	Anglo-Saxon Coal Company	—	4	4	10 per cent. Jan.	10 per cent. Jan.
426	Ballaughaden (tin), St. Just	11	—	—	9 14 to May 1852	0 5 to May
4026	Bedford United (copper), Tavistock Devon	2	5	5 6	0 2 to April	0 2 6 to April
5000	Black Craig (lead), Kirkcudbrightshire	—	100	—	0 2 6 to Nov. 1851	0 2 6 to Nov.
64	Boscawell Down (tin), St. Just	—	100	—	750 0 to May 1849	—
100	Botalack (tin and copper), St. Just	182	240	—	457 10 to May 1852	5 0 to May
1000	Bryntal, Llanidloes, Montgomeryshire	3	14	14	0 5 to end June	0 5 to June
4000	Callington (lead and copper), Callington, Cornwall	30	4	—	6 0 to Sept. 1847	1 0 to Sept.
4000	Calstock United (copper)	2	3	—	0 5 to Oct. 1851	0 5 to Oct.
1000	Carn Brea (copper and tin), Illogan	15	70	—	208 0 to Mar. 1852	2 0 to Mar.
200	Conford (copper), Gwennap, Cornwall	75	105	105 107	15 0 to Feb. 1852	2 0 to Feb.
1000	Conduff (copper and tin), Camborne, Cornwall	105	170	—	5 0 to 1851	0 0 to 1851
128	Cornwall (copper and tin), Cornwall	60	310	—	270 10 to May 1852	7 0 to May
1000	Cornwall (copper and tin), Cornwall	1	310	—	55 0 to 1850	—
678	Ding-Dong (tin), Guilva	5	20	—	855 14 to 1847	—
1000	Dolcoath (copper and tin), Camborne	252	30	—	238 0 to 1843	—
2500	Drake Walls (tin and copper), Calstock	6	95	100	242 10	—
128	East Pool (tin and copper), Pool, Illogan, Cornwall	24	150	300	2245 0 to Mar. 1852	10 0 to March
94	East Wheal Crofty (copper), Illogan, Cornwall	125	335	—	10 per cent. ann. div.	10 per cent. Jan.
128	East Wheal Rose (silver-lead), Newlyn	50	335	—	45 per cent. to June	10 per cent. year
3000	Fenton Pottery Coal and Iron	6	30	—	0 6 to May	0 4 in May
494	Fowey Consols (copper), Fowey, Cornwall	40	3	—	127 0 to Feb. 1852	7 10 to Feb.
3715	General Mining Company for Ireland (copper and lead)	1	150	—	0 7 6 to Aug.	0 2 6 to Aug.
1000	Goggin (lead), Goggin, Cornwall	5	150	—	25 0 to Feb. 1844	0 2 6 to Aug.
96	Great Consols (copper), Gwennap, Cornwall	1000	200	—	3 0 to 1847	3 0 to 1847
1000	Great Polgoth (tin), St. Austell	3	3	—	0 5 to Sept. 1851	0 5 to Sept.
119	Great Work (tin), Gernoe	100	200	—	0 2 to 1st Aug.	0 10 to Aug.
1024	Herodfoot (lead), near Liskeard, Cornwall	8	16	—	1036 0 to 1st Feb.	3 0 to Feb.
1024	Holmehol (lead and copper), Callington	24	16	—	670 0 to 1st April	15 0 to April
2000	Holyford (copper), near Tipperary	11	7	—	1 0 6 to July	0 4 6 to July
756	Kirkcudbrightshire (lead), Kirkcudbright	9	13	—	0 8 0 to Apr. 1852	0 4 0 to April
1000	Kirkcudbrightshire (lead), Kirkcudbright	17	13	—	7 10 to Feb. 1847	7 p. cent. ann. div.
160	Lewis (tin and copper), St. Erth	2	13	—	239 0 to April	5 0 to April
100	Lever (copper and tin), Penryn, Cornwall	24	650	—	235 0 to Jan.	4 0 to Jan.
100	Lisbourn (lead), Cardiganshire, Wales	75	10	—	1 0 to 1st April	0 16 to Mar.
3000	Low's Patent Copper Smelting Company	9	7	—	15 to June 1851	0 10 to 4th June
5000	Merlyn (lead), Flint	23	10	—	75 0 to Mar. 1852	15 0 to March
1000	Mining Company of Ireland (copper, lead, and coal)	7	6	—	18 14 6 to Nov.	0 10 to Nov.
200	North Pool (copper and tin), Pool	22	175	—	260 0 to Nov.	2 10 to Nov.
140	North Roskear (copper), Camborne	10	180	—	39 0 to April 1852	3 0 to April
6000	North Wheal Bassett (copper and tin), Illogan	—	10	—	119 15 to May 1852	4 0 0 to May
6000	Par Consols (copper), St. Blazey	13	40	—	4 10 to Mar. 1851	0 10 0 to Mar.
116	Parson's Consols (copper and tin), Penryn, Cornwall	21	240	—	864 0 to Feb. 1852	5 0 to Feb.
200	Phoenix (copper and tin), Linkinghorne	30	240	—	11 10	0 6 to July
960	Providence Mines (tin), Uny Lelant	20	22	—	2 11 to July 1849	0 6 to July
256	South Caradon (copper), St. Cleer	24	107	—	5 17 6 Sept. 1850	0 10 to Sept.
256	South Treguena (copper), Redruth, Cornwall	16	160	—	14 7 6 to Nov.	0 10 to Nov.
248	South Wheal Frances (copper), Illogan	80	130	—	1 3 to Oct. 1847	0 5 Oct. 1847
1024	Spearhead Consols (tin), St. Just, Cornwall	1	9	—	422 10 to 5th April	7 10 to May
1024	St. Aubyn and Grylls (copper and tin) Breage	3	8	—	277 5 to May 1852	7 10 to May
1000	St. Ives Consols (tin), St. Ives	80	12	—	19 0 to Feb.	0 0 to Feb.
1000	Stray Park and Camborne Vein (copper), Cornwall	10	4	—	2 10 to Sept. 1851	0 10 to Sept.
9600	Tamar Consols (copper and tin), Penryn, Cornwall	4	4	—	2 6 to March	0 5 to March
6000	Tinroft (copper and tin), near Pool, Illogan	7	11	—	177 5 to Apr. 1852	4 0 April
612	Trevelan (silver-lead), Menheniot	4	11	—	10 10 to May 1852	2 10 to May
5000	Trevelan Consols (copper), Redruth	6	3	—	290 0 to 3d April	15 0 to 3d Apr
96	Trevelan (copper), Gwennap, Cornwall	32	200	—	165 0 to May	17 10 May
120	Trevelan (copper), Gwennap, Cornwall	5	15	—	5 0 0 in 1850	5 0 in 1850
120	Trevelan and Barriar (copper), Gwennap	130	175	—	2339 10 to Feb. 1852	8 0 to Feb.
100	Trumpet Consols (tin), near Helston	95	120	—	0 0 to July 1851	0 3 to July
200	Union Consols (copper), Gwennap	80	75	—	19 10 to 7th Feb.	2 10 to Feb.
1024	Wellington Consols (copper), Penryn, Cornwall	7	6	—	196 0 to May	2 10 to May
256	West Caradon (copper), Liskeard, Cornwall	24	120	—	31 5 to Aug. 1851	3 0 to Aug.
1024	West Providence (tin), St. Erth	5	47	—	120 0	—
256	Wheal Bassett (copper), Illogan	10	430	—	209 10 to Apr. 1852	0 4 April
256	Wheal Brewer (copper), Gwennap, Cornwall	4	9	—	26 10 to April 1851	2 0 May
256	Wheal Buller (copper), Redruth	5	705	650 705	8 0 to May	0 10 May
100	Wheal Friendly (tin), St. Agnes	70	31	—	348 per cent. March 1852	28 p. cent. March
128	Wheal Friendship (copper) Devon	120	125	—	—	—
6000	Wheal Golden Consols (silver-lead), Penryn, Cornwall	3	5	—	—	—
420	Wheal Level (copper), Redruth	80	38	—	—	—
112	Wheal Margaret (tin), Uny Lelant	75	140	—	—	—
512	Wheal Mary Ann (lead), Menheniot	5	43	—	—	—
40	Wheal Owles, St. Just, Cornwall	140	250	—	—	—
240	Wheal Roeth (tin), Uny Lelant	20	80	—	—	—
198	Wheal Seton (tin and copper), Camborne, Cornwall	107	185	—	—	—
520	Wheal Trevelan (silver-lead), Liskeard, Cornwall	8	45	—	—	—
1024	Wheal Trevelan (copper and tin), Gwennap, Cornwall	9	23	—	—	—
6000	Wicklow (copper), Wicklow	5	28	—	—	—

## FOREIGN MINES.

Shares.	Mines.	Paid.	Last Price.	Present Price.	Dividends per Share Declared.	Last Paid.
5000	Alican Mining Company (copper), Norway	£14	2	—	3 0 0 to Mar. 1848	—
10000	Brazilian Imperial (gold), Brazil	24	—	—	3 17 6 to Dec. 1844	—
1000	Cobre Copper Company (copper), Cuba	40	34	—	5 10 0 to Oct. 1851	2 10 to Jan.
2000	Compañia Minera (copper), Chile	20	5	—	3 18 0 to Oct. 1851	5 0 to Oct. 1852
10000	General Mining Association (iron & coal), Nova Scotia	20	10	—	6 10 0 to Oct. 1851	10s. June, 1851
2700	Marmato (gold), Colombia	24	12	—	3 0 0 to Dec. 1851	17s. to Dec. 1851
7000	Royal Santiago (copper), Cuba	12	10	—	33 4 0 to July 1846	—
11000	St. John del Rey (gold), Brazil	15	28	—	15 17 6 to Dec. 1851	17s. 10s. to Dec.
43174	United Mexican (silver), Mexico	AV.	24	—	1 12 6 to Feb. 1850	7s. 6d. Feb. 1850

## MINES WHICH HAVE SOLD ORES.

Shares.	Mines.	Paid.	Last Price.	Present Price.
940	Balloon Consols (tin), Uny Lelant	3	—	—
1024	Ballaughaden United (tin), Sanced	34	1	—
508	Bell and Lanarth (copper), Gwennap	6	—	14
3000	Bishopstone (silver-lead), Glamorganshire	4	—	—
8000	Blancavon (iron), South Wales	60	10	—
1024	Bodmin Consols (lead), Wadebridge	7	5	—
1024	Bodmin Wheal Mary (copper), Bodmin	105	34	—
1024	Boringdon Park (silver-lead), Plympton	3	6	—
240	Boscaw (tin), St. Just	15	16	—
2400	Boscon (tin), St. Just	1	5	—
6250	Bottle Hill (copper) Plympton	1	2	—
14000	Brace Gooch Slate and Slab Quarries	4	—	—
18000	Bronhof (lead), Wales	1	—	—
2290	Bryn-Alyn (lead), Cardiganshire	3	—	—
7500	Buaparc (tin and copper), Gwennap	1	14	—
2000	Bwch Consols (silver-lead), Cardiganshire	4	—	—
1000	Cae-Gwynon (silver-lead), Cardiganshire	1	—	—
4000	Calstock Consols (copper)	47	2	—
2000	Carbana (tin and copper), Crowan	4	—	—
2000	Cartowen Con. (cop. & lead), Wadebridge	67	16	—
1050	Carvannall (copper), Gwennap	4	—	—
1050	Cefn Bruno (lead), Cardiganshire	2	50	45
8000	Charlestown United (tin), Cornwall	3	34	—
1024	Chyngar (tin and copper), St. Enoder	5	6	—
1024	Clyth and Wentworth (tin & ca.), Redruth	3	6	—
2000	Cood Mawr Pool (lead), Llanwrst	10	15	—
900	Cook's Kitchen (copper and tin), Illogan	15	34	—
1000	Copper Bottom (copper), Crowan	10	7	—
900	Court Grange (silver-lead), Cardiganshire	10	12	—
1600	Craig-y-Mwyn (lead), Llanidloes, Mont.	24	10	—
256	Cran and Belawa (copper), Camborne	25	19	—
18	Creswell (copper), Cornwall	1	60	—
9000	Cubert (silver-lead), Cornwall	18	12	—
1000	Cwm Daron, Wales	2	24	—
1000	Cwm Erfin (lead), Cardiganshire	7	24	—
2000	Cyfnedd Fawr (lead), Llanegryn	3	1	—
3000	Dalrhew (copper and lead), Brecon	1	5	—
1000	Daren (silver-lead), Cardiganshire	3	34	—
7100	Derwent (silver-lead), Durham	10	2	—
2823	Devon and Gwent (copper), Cornwall	2	—	—
1024	Devon and Cornwall United (copper), Tav.	6	—	—
4000	Dolfrwynog (copper), Merioneth	4	1	—
128	Drift Moor (tin), Sanced	4	4	—
3000	Dyffryn (lead), Wales	10	12	—
1024	East Alfred Consols (lead & cop.)	28	5	—
256	East Basset (copper) Redruth	15	15	—
2500	East Birch Tor	3	8	—
1948	East Crowndale (copper), Tavistock	6	2	—
3000	East Daren (lead), Cardiganshire	19	8	—
1100	East Frongoch (lead)	14	5	—
4000	East Gwips Lake Junction (copper)	1	—	—
612	East Seton and Wheal Maude, Redruth	8	8	—
9000	East Tamar Consols (all-lead), Beerferris	18	—	—
256	East Tolgus (copper), Redruth	10	15	—
2048	East Wheal George (cop.), Walkhampton	14	2	—
512	East Wheal Lelant (copper), Penryn	14	9	—
1024	East Wheal Margaret (tin and cop.), Redruth	34	—	—
8000	Eaton Mountain (lead & cop.), Staffordsh.	10	12	—
836	Eaton Mountain (lead & cop.), Staffordsh.	24	—	—
1280	Esgar Lee Llanfihangel-y-Croft, Devon	62	3	—
256	Forest (copper and silver-lead), Devon	2	1	—
13000	Gall-y-Maen (silver-lead), Merioneth	3	2	—
6000	Garreg (lead), Flint	1	11	—
3000	Georgina Consols (tin), St. Ives	54	6	—
256	Gonamena (copper), St. Cleer	45	12	—
243	Graham and Croft Goidal, copper	60	70	—
800	Great Beam (tin), Roche and St. Austell	18	27	—
4035	Great Cowarth (silver-lead), Merioneth	2	2	—
1024	Great Wheal Alford (copper), Phillack	17	16	—
5120	Great Wheal Badden (tin and silver-lead)	49	24	—
—	Great Wh. Lelant (cop.), Penryn	—	—	—
5000	Great Wheal Lelant (cop.), Stoke Clims.	—	—	—
1086	Guernsey Mines (copper), Camborne	71	16	—
612	Halsmann and Croft Goidal, copper	60	70	—
612	Hawke's Point (copper), Uny Lelant	8	—	—
6000	Hogton Down Con. (copper), Calstock	3	4	—
29000	Kenners and West of Ireland (copper)	1	—	—
873	Keewick (lead), Portishead, near Keewick	14	4	—
1024	Kingsett and Bedford (lead and copper)	54	—	—
744	Lamherous Wheal Maria (copper & tin)	14	8	—
353	Lanarth Consols (copper), Gwennap	4	4	—
13000	Llanymalec (lead), Cardiganshire	23	—	—

Shares.	Mines.	Paid.	Last Price.	Present Price.
6000	Marko Valley (copper), Caradon	10	1	..
5000	Mendip Hills (lead), near Bristol	31	1	..
1024	Mill Pool (tin and copper), St. Hilary	4	..	..
2000	Mollard (copper)	3	1	..
4500	Mount Tack (tin & cop.), Lelant, Corn.	1	2	..
320	Nanscove (tin and copper), Camborne	11	12	..
3000	Nant-y-Car (copper), near Redruth	89	16	..
1024	North Buller (copper), Redruth	7	10	..
2900	North Downs (copper), Redruth	4	2	..
2500	North Francis (copper), Camborne	1	..	..
2000	North Levant (tin and copper), St. Just	14	2	..
2000	North Tamar (silver-lead & copper) Devon	2	12	..
1200	North Wh. Buller, or Gt. South Tolgus	64	7	..
2048	Okel Tor (lead), Calstock	4	2	..
956	Old Wheal Bassett (copper), Redruth	2	..	..
10240	Pembroke & East Crinis (cop.), St. Aust.	24	3	..
1500	Pendarras (lead), Cornwall	4	..	..
6000	Pendarves and St. Aubyn (tin and copper)	1	1	..
1026	Pendarves Consols (copper), Camborne	1	2	..
3048	Pentire Glaze (silver-lead), St. Minver	5	10	..
1024	Penzance Consols (tin) Sanced	3	14	..
1000	Peter Tavy and Mary Tavy (copper)	4	4	6
1000	Poiborro (tin), St. Agnes	15	13	..
3000	Poigear and Lencarrow (copper and tin)	1	1	..
3000	Portkellis United (tin), Wendron	10	10	..
1024	Prace Consols	31	..	..
2948	Prince Albert Cons. (tin), Penzanceabuloe	2	34	3 1/2 4 5
7000	Reeth Consolidated, Towednack	4	14	..
2500	Rhoswydol and Bacheliddon (lead) Wnles.	11	16	..
1948	Rix Hill (tin), Tavistock	3	1	..
8000	Rocks and Treverbyn (tin), St. Austell	4	4	..
256	Rosewarne (copper and tin), Gwinear	2	14	..
3048	Runnaford Coombe (tin)	3	1	..
1024	Sidney Godolphin (copper), Breage	1	3	..
6200	Silver Valley & W. Brothers (silver-lead)	1	..	..
2000	South Carn Brea (copper), Illogan	10	10	10
456	South Friendship Wh. Ann (copper & tin)	30	28	..
2000	South of Scotland	1	1	..
300	South Speed (copper and tin), Uye Lelant	25	35	..
9000	South Tamar (silver-lead), Beer Ferris	1	4	4 1/2 4 1/2
256	South Wheal Josiah (copper), Calstock	2	..	..
280	Spearne Moor (copper), St. Just	30	40	..
999	St. Minver-Jonsals (silver-lead)	3	3	..
667	Tavy Consols (copper), near Tavistock	9	5	..
1000	Tokenbury Cons. (cop.), St. Ives, Liskeard	3	2	1 1/2 2
1024	Trannack and Bosence, St. Erth	4	4	..
1024	Trannack United Mines (tin and copper)	1	3	..
1024	Trebarvah (copper and tin), Perranulmine	12	6	6 1/2
168	Tregonar (silver-lead) Wadebridge	20	5	..
1000	Treloweth (copper), St. Erth	6	6	..
672	Treylyn Consols (tin), St. Ives	4	2	..
2000	Trevenance (copper), Calstock	4	..	..
4048	Treveljann (tin and copper)	21	3	3 1/2 4 1/2
2000	Tyn-y-Worglod (slate), near Carnarvon	4	4	..
1024	United Mines (copper and tin), Tavistock	12	10	..
6000	Unity Consols (cop. & tin), Gwinear	2	3	..
1000	Vale of Towey	3	27	..
8000	Varleggan Consols (copper)	1	..	..
1024	West Alfred Consols (copper), Phillack	11	31	26 36 1/2
6000	West Bassett (copper), Illogan	1	7	..
1024	West Bealton (cop.), St. Austell	39	6	..
256	West Damsel (copper), Gwennap	4	79	..
1024	West Ding-Dong (tin), Sanced	2	..	..
512	West Fowey Cons. (tin & cop.), St. Blazey	40	50	..
2048	West Goginan (silver-lead), Cardiganshire	3	14	..
1024	West Par Consols (copper), St. Blazey	10	10	..
200	West Seton (copper), Camborne	73	125	..
940	West Tolgus (copper), Illogan	14	2	..
120	West Trethellan (copper), Gwennap	15	10	..
512	West Wheal Francine (copper), Illogan	10	12	..
500	West Wheal Tawn (cop. & tin), Penzance	2	12	..
1024	West Wheal Treasury (copper), Gwinear	8	5	6 7
1070	Wheal Adams (lead), Christow, Exeter	13	16	..
1000	Wheal Agar (copper), Illogan	6	5	..
1228	Wheal Arthur (silver-lead & cop.), Calstock	5	14	..
3073	Wheal Augusta (tin), St. Just	1	12	1
240	Wheal Bal (tin), St. Just	5	5	..
1024	Wheal Crebor (copper), Tavistock	6	18	20 22
1024	Wheal Chiverton (copper and tin) Perran	4	5	5 1/2
4056	Wheal Frenn Edgworth	17	15	..
182	Wheal Ivies (lead), St. Erme	17	15	..
764	Wheal Francine (copper), near Tavistock	14	4	..
—	Wheal Grenville (copper), Camborne	3	8	..